

THE GEORGE
WASHINGTON
UNIVERSITY
WASHINGTON, DC

Tracking and Student Privacy

Technology
Subcommittee



The Good News

The subcommittee thanks

- the President for the thoughtful message to the community
- the Provost who has been a leader in transparency
- GWIT for meeting the subcommittee and answering countless questions

* Also, this presentation will concentrate on risks. But many risks do not appear to have been realized

Why this is important?

Intellectual Community

Campuses are not businesses; they are learning communities

Students (and some faculty and staff) have GWU as their home for four years. It is a community intentionally created for its members to be intellectually curious. Privacy is essential for this.

Healthy intellectual communities require privacy for students

- Students may not want electronic records of what political groups they joined

- Students may not want electronic records of their participation in planning for protests

- Students may not want electronic records of meetings with dissidents

- Students may not want electronic records of their locations on campus for security reasons (e.g., DACA)

- Students may not want electronic records of their visits to counseling

- * Even if GWU does nothing with the electronic records, the presence or existence of these records is an inherent risk to students

Why this is important?

Residential Community

Most students and some faculty and staff live on campus and depend on it for services. There is no separate “home” for most of the year.

The creation of an effective residential community requires creating at least some kind of “private sphere” where people enjoy traditional privacy protections on campus.

- Students may not want electronic records kept of who they spend the night with

- Students may not want their attendance at private social gatherings to be tracked or logged

- Students may not want electronic records kept of their visits to the Health Center

- Students may not want electronic records of support groups they participate in (e.g., AA)

- * Students may not trust the university to keep this information confidential.

Why is this important?

Faculty Life

Faculty also presume that the university enhances privacy in ways necessary for the research mission

At a campus like GW, faculty and especially graduate students frequently meet with individuals who expect that electronic records are not kept of their meetings with researchers

The university should not keep electronic records of individuals who are being interviewed with the promise of complete confidentiality

The university should not keep records of individuals who participate in clinical research with the promise of complete confidentiality

* Respondents may not trust the university to keep their records secure

It is also a threat to faculty life more generally (e.g., Shared Governance Conversations, GWUFA meetings)

A disclaimer

The subcommittee is working from meetings and discussion. We have not seen documents. Our goal is to help people understand the program as it has been explained to us.

The Basic Facts: A History

GW began a process of modernizing wifi across the university

GW received a “free trial” of Degree Analytics software tools

GW began a campus wide program in Fall 2021. It lasted only for the semester



You might say that GW runs on WiFi. After all, more than 50,000 devices connect to the internet through 7,500 wireless access points – *each day*. That’s why GW IT decided to become one of the first institutions to begin testing and planning for the deployment of the new wireless standard called WiFi 6, considered the next generation in WiFi technology that allows more efficiency with faster wireless speeds, improved roaming experiences, more robust coverage and better performance in congested areas, like college campuses.

The first phase of these continuous improvement efforts is underway. Expected to be completed by late 2020, this phase includes assessments in 65 buildings and the kickoff of upgrading more than 4,000 access points to take place over the next few years. The buildings selected for this phase all have access points that are the oldest model currently supported at GW.

During the initial rollouts we will continue to gather feedback from students, faculty, and staff. This feedback, along with our infrastructure lifecycle plans, will inform our building prioritization efforts to meet current and future campus needs.

How was data collected

Your device connects to GW wifi via access points (gwireless, eduroam)

The access server stores information about the users who log into wifi

There are many access points around campus (one estimate was about 6000)



What data was collected

Complete Locational Table: All users access point, user id, timestamp, and device name

Student Table: Joined the above information to the Student Information System (e.g., GWID, Greek, Athlete, Gender, Dining Plan Type, Admission Type, Residence Hall)

Note: User ID and GWID were hashed

Outputs

Heat maps of campus

How many people were in a building?

What floors were they on?

Where were they generally clustered?

Data on student users

Do students leave over Thanksgiving?

What kinds of students leave?

Dashboard example

- *A line graph of campus population by week.
(drops on Thanksgiving)*

The Concern is the Tables and not the Dashboards

The dashboards were aggregate data

The tables were individual-level data

Likely billions of rows

Thousands of rows per student user

Link to individualized information

Questions about security



Facility Usage Module

1. Enhance Operations

Analyze variances of actual facility usage compared to plans and bookings

2. Measure Facility ROI

Quantify the value of all learning spaces and student support facilities across the campus

3. Optimize Student Achievement

Optimize schedules via analysis of most-attended classes and cohort-level attendance and outcomes

Complete Visibility

Understand facility use on an accurate and detailed basis to improve utilization, prioritize investments, identify cost savings and optimize experiences

Billions of Rows of Data Per Semester

Empower school administrators to make data-informed decisions that enhance educational opportunities and operations

Degree Analytics Website

<https://www.degreeanalytics.com/facility-usage>

Again Good News

The substantial threat to privacy would occur if GW used vendors who engaged with data brokers or if table data was compromised

- As far as the subcommittee knows, this did not occur.
- We also did not detect *any* nefarious intent
- But again these are inherent risks to any collection of personal information.

The first problem: Intrusion Outweighs Value

While the program was extremely intrusive, little value was achieved.

No clear thought into the research questions that guided the pilot.

Other easy means of accessing information (building cards, event monitors)

In sum, the costs to privacy outweighed the negligible gains.

The second problem: no consent or privacy notification

Gaining consent and providing notification is necessary because of inherent risks in collecting and storing personal information

- 1) Vendor Practices
- 2) Higher Education Norms
- 3) GW Policy

Vendor Best Practices

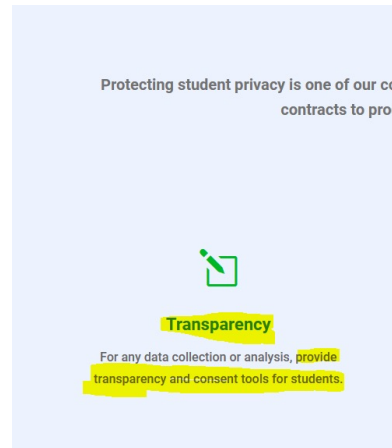
GW Partnered with Degree Analytics

GWIT successfully restricted individual location data to individuals with user permissions

Degree Analytics however is clear that their tools require consent by users

They did not provide any notification, explain the program, provide opt outs, or other information

These policies are listed by Degree Analytics in many places



Degree Analytics Website

Transparency

Most universities are utilizing network data to some degree before working with us. As our work then begins to expand an institution's understanding of what's possible with data, we advocate for and assist with student communication packages outlining the following key principles:

- Clearly identify how student location data will be used to improve campus experiences
- Identify what student data will NOT be used i.e. web traffic, searches, etc.
- Provide an opportunity for opt-outs
- Provide an opportunity for feedback or more information

Degree Analytics: Data Privacy, Higher Ed (available from Aaron Benz)

Higher Education Norms

Universities publicly announce these programs

- McMaster
- Purdue
- Sacramento State
- VCU

The example of VCU

- Created a public semester pilot
 - Students notified and provided opt-outs
 - Students saw no value and half opted out
- * VCU was different program in kind but shows privacy is salient for many students*

Students using Degree Analytics' WiFi system can opt-out by clicking "no" on a window that asks whether they want to help "support student success, operations and security." But Benz, the company's chief, said very few do.

That is, until last month at VCU, which recently launched a pilot program to monitor a set of courses required of all freshmen. Students said they were frustrated to first learn of the system in a short email about a "new attendance tool" and were given only two weeks before the opt-out deadline passed.

Students quickly scattered the opt-out link across social media, and the independent student newspaper, the Commonwealth Times, [sowed doubts](#) about the program's secrecy and stated mission, writing, "Student success my ass." The university declined to make an official available for an interview.

"Colleges are turning students' phones into surveillance machines, tracking the locations of hundreds of thousands." Washington Post, December 24, 2019

GW Policy

GW's Personal Information and Privacy

“the data collector must inform the individual what information is being collected (both actively and passively)”

“the data processor must make available a privacy notice detailing how personal information will be used and who to contact with any questions or concerns.”

Who is Governed by this Policy

- Staff
- Faculty
- Students
- Contractors
- Any persons or entities who generate, collect, use, store, or process personal information on behalf of the University

Policy

Information plays a critical role in the university's educational, research, administrative, and public service activities. The university recognizes the importance of safeguarding personal information, in all formats, that is processed or shared within the university and with third parties on its behalf.

This policy provides guidance to university faculty, staff, and students on the community's responsibilities with respect to privacy and protection of personal information.

Collection of Personal Information

All university offices, contractors, and others that collect personal information on behalf of the university (each a “data collector”) are responsible for collecting only the minimum amount of such information necessary. Collecting no more information than is necessary minimizes the information that the university must secure and hold private. When collecting personal information from individuals, the following is required:

- Transparency:** the data collector must inform the individual what information is being collected (both actively and passively).
- Lawful Basis:** the data collector must establish a lawful basis for the collection of personal information. This may include obtaining consent, collection of information necessary to perform under a contract, a legal obligation, vital interest, public task, or a legitimate interest.
- Adherence with privacy notice:** any information that is collected through a university webpage (gwu.edu), regardless of where it is hosted, must adhere to the [website privacy notice](#). This also applies to contracted third parties that host marketing web pages on behalf of university academic programs.

Use of Personal Information

Any university office, contractor engaged to act on the behalf of the University, or other university-authorized persons or entities using or processing (each a “data processor”) personal information on behalf of the university is required to do the following:

- Notice:** the data processor must make available a privacy notice detailing how personal information will be used and who to contact with any questions or concerns.
- Non-Public Information:** the data processor using information collected on behalf of the university is prohibited from selling, sharing, or publicizing personal information. Personal information is to remain private and is considered “Non-Public Information,” as defined under the [Data Management and Protection Standard](#).

Next Steps

Crucial to determine what policies need to be in place

- Already invested in infrastructure
- DNA Spaces on the horizon

How did this happen?

IT Executive Committee

The IT Executive Committee, chaired by the **Vice President for Information Technology and Chief Information Officer**, is responsible for all major IT decision-making for the University and provides guidance, as well as sets IT priorities to enable the University to balance its improvement goals with available resources in alignment with the University's strategic goals and mission.

The committee evaluates input received from the following campus IT governance advisory committees and makes IT recommendations to, and receives direct feedback from, the Dean's Council two times per fiscal year.

- Administrative Systems Advisory Committee
- Information Security Advisory Committee
- Infrastructure Advisory Committee
- Learning and Technology ecosystem Advisory Committee
- Research Technology Advisory Committee

Northwestern IT Governance



University adopts new IT governance structure

February 21, 2017

The Information Technology Plan includes the formation of an integrated set of IT Governance and Advisory committees to guide the implementation of strategy, recommend priorities and provide input to improve the effectiveness of technology.

Governance Committees

The Information Technology Executive Committee (ITEC)

Wake Forest IT Governance

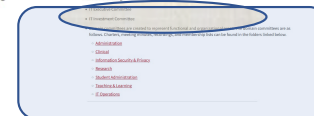


IT Governance

The IT governance structure works to improve the information technology environment at Washington University in St. Louis by developing a coordinated vision of IT that serves the university's mission and strategic plan.

Process

Our approach to managing IT governance are based on the processes and mechanisms that anticipate, prioritize and coordinate the scheduling of IT related projects and policy responses across the entire university. The effectiveness of approach is dependent on those who participate. Our ability to quickly respond to IT issues requires a clear ownership of responsibility and decision making authority within the Strategic Investment structure. It is a highly collaborative process requiring interdisciplinary participation. The framework is a cross-functional team consisting of representatives from administration, schools and departments across the university and IT leaders. This structure includes the following:



Washington University in St.
Louis IT Governance

IT Steering Committee (ITSC)

The ITSC creates and sustains a set of processes for IT governance and prioritization at Emory University that are timely, transparent, and clearly aligned with the university's missions. ITSC is charged with:

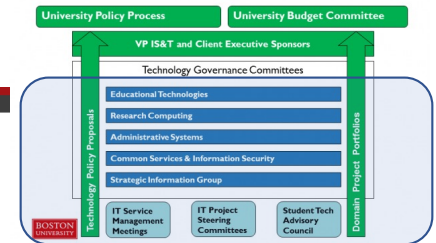
- Creating and maintaining a subcommittee structure that represents the functional and technology interests of the institution.
- Implementing strategic decision-making processes that are consistent with best practices in higher education and across other industries.
- Reviewing and understanding the financial context for IT services and forwarding recommendations for project funding levels to Emory's Ways and Means Committee.
- Reviewing and re-affirming prioritization decisions of the IT governance subcommittees.
- Evaluating proposals that do not fit within the scope of the functional and technology subcommittees.
- Working with the VP of Information Technology and CIO to communicate the status of IT initiatives to the University community.

University Subcommittees

- Digital Scholarship & Pedagogy
- Finance
- Human Resources/Payroll
- Research
- Research Administration
- Student Services
- Technology Infrastructure and Policy

Emory IT Governance

BU IT Governance Structure



Governance Committees

IT Executive Committee

IT Policy Committee

Data Analytics Executive Committee

Enterprise Systems Advisory Committee

Business Systems Advisory Committee (URMC)

Research IT Advisory Committee

Educational Technology Advisory Committee

Core Technologies Advisory Committee

Data Center Systems Advisory Committee

Data Security Task Force

URMC Privacy & Security Executive Committee

University of Rochester IT
Governance

GWs Hierarchical Structure

Transition to Shared Services Created a Hierarchical Structure

GWIT has a single report

No Executive Committee to ensure programs are consistent with strategic plan or have value

No clear advisory committees to ensure consultation by provost, deans, faculty, and students

Potential Conflict of Interest as Compliance is not separate

No institutionalized means to ensure programs work toward the education and research mission of the university

