1. **What are the major factors in your discipline that are currently shaping its long term, strategic evolution?**

Discipline: geoinformatics.

Ubiquitous positioning sensors, e.g., Global Navigation Satellite System (GNSS) and WiFi Positioning System (WPS).

Location-based services.

Location-aware mobile devices, e.g., smartphones.

High-resolution spatial and temporal remotely sensed data, e.g., satellite orthoimagery and laser imagery.

Universal/Personal navigation assistance.

Very large geospatial data storage and (efficient) processing (Data-Intensive, Big Data).

High-performance computing resources: supercomputers, parallel computing, grid computing, cloud computing.

Green/Utility computing (e.g., cloud computing).

Location-based social networking.

2. **What is the impact of these factors? Why are they so important? What difference do they make?**

It is anticipated that these factors will be the impetus for the development of new technologies and techniques to address challenging real-world problems such as those in transportation engineering, environmental engineering, public health, and education.

3. **How do these factors affect the future of SIS and your program?**

Conducting cutting-edge geoinformatics research and having current geoinformatics curriculum will help: (a) SIS/PhD students gain an in-depth understanding of the emerging geoinformatics research questions and challenges and the means to tackle them so that they can establish or advance their career path as geoinformatics researchers in academia and industry and (b) SIS/MSIS students gain the requisite skills to deploy and manage geoinformation systems in industry, conduct research in geotechnologies, and pursue PhD research in geoinformatics.

4. **How can the School respond most effectively to these factors?**

By establishing strategic partnerships (e.g., co-op programs) with companies.

5. **Who are the necessary partners that would need to be engaged in order to respond effectively?**

Industry partners such as FedEx, UPS, Michael Baker Engineering, Management Science Associates, etc.

6. **What would an effective response look like and what difference would it make?**

Organizing and conducting an annual “Geoinformatics Workshop” on geoinformatics research and development projects in Pittsburgh. The purpose of this annual workshop is for the industry partners to showcase their geoinformatics projects to faculty, students, and other companies. The workshop participants should include researchers in academia, professionals in industry, and students from SIS and other departments/schools.

The workshop will benefit the SIS students as they will learn about real-world geoinformatics projects developed/implemented by industry.