IUGFS TEN YEAR STRATEGIC PLAN

**Academic Infrastructure - commitment to remain at the forefront**

There is an ongoing need to improve the academic infrastructure of the Field Station so that faculty can employ established best practices for instruction and develop new best practices. These improvements are to include not only the physical space and equipment but also the concepts, materials, and curriculum used.

– As an example, the new classroom, built in 2011, facilitates lectures that include advanced visualization and collaborative work capabilities. The adjoining computer lab allows for instruction using databases and computational methods, including processing, modeling and interrogation of large data sets (e.g. LiDAR point clouds).

Historically, IUGFS has integrated laboratory and field based instrumentation into student instruction and to enhance research efforts by students, IUGFS faculty, and other users of the Field Station. While some of the field based instrumentation has been expanded over the past decade (e.g., real-time hydrologic stations) and a seismograph was installed in the basement of the new classroom, many of the laboratory facilities at the Field Station are no longer usable. New laboratories need to be established to allow on-site geochemical, geophysical, geodetic, remote sensing, environmental, meteorological, and water analysis.

**Educational Leadership and Innovation – integration of traditional and emerging best practices**

IUGFS is located in one of the best locations in North America for field education, but it is imperative that the curriculum keep pace with modern approaches while still maintaining the traditional methods that still form the fundamental framework for field studies. By continuing to improve and incorporate innovative instructional methods and new complementary data sets that amplify the local and regional geological setting we can keep the education students receive at the Field Station up-to-date with the latest technologies. This applies to both existing courses and the creation of new courses. These new courses would be aimed at a wide range of levels (e.g. graduate, K-12, professional) within the geological sciences as well as courses in atmospheric science, part of our newly expanded department, other sciences (e.g. biology), arts and humanities (e.g. art, economics, history), etc.

The current IUGFS faculty and colleagues are continuously improving the curriculum to merge fieldwork with complementary geochemical, stratigraphic, subsurface and geophysical data sets. They are also incorporating modern instruments and computer tools with traditional field work. We would like to expand these capabilities so that IUGFS can more easily be used to host research projects that are aimed at the production of large data sets that can be used to for fundamental research, determine/establish best practices for field education and new/innovative field educational training sessions.

Recruitment of new faculty members to replace and complement existing faculty members needs to increase to meet the desired demands for more and better versed faculty as we move into the next generation of students and course demands. Finding and mentoring new faculty members is increasingly more difficult as a result of pressures from present day academic
demands on faculty members. This is further complicated by the need to provide an extended period of mentoring and collaboration in the field and during evening work sessions with the students. The last piece of this puzzle is to find individuals who can provide the necessary specialization areas so that we can provide both breadth and depth for our students.

**Housing Infrastructure** - renovation and new construction

Student housing facilities, including dormitories, bathhouses and laundry rooms, need to be significantly renovated or replaced. This need is for the safety and convenience of students taking the annual course offerings at the Field Station and to accommodate more diverse groups of participants in instructional, research, continuing professional education and educational outreach activities.

- Faculty housing was replaced in 2007-2008 and should be viable for several decades without significant upgrades.

**Sustainability** – ensure that students, faculty, researchers and IU can afford to utilize the Field Station in perpetuity

Develop a stable funding system that addresses student costs, faculty salaries, and building maintenance and replacement. Recognizing that the great majority of students are non-residents of Indiana and so face increasing high tuition rates the establishment of a substantial scholarship program is necessary to keep the program’s truly national in scope. This is one important reason why our field programs hold premier status. Recruitment and retention of faculty members who dedicate significant amount of their academic efforts requires resources to provide the appropriate level of compensation for these efforts. And, finally, the infrastructure that is the Field Station needs to be maintained and upgraded through the addition of new buildings that will allow the students and faculty to focus on field based education and research.