



MASSACHUSETTS INSTITUTE OF TECHNOLOGY  
**GRADUATE STUDENT COUNCIL**

**Statement on Infrastructure Development Research**

Quality of life in the United States is indelibly linked to the quality of our infrastructure, which directly affects access to jobs, housing, retail, education, and more. In addition, large infrastructure projects provide numerous jobs and are an investment in developing regions throughout the country.

The Graduate Student Council (GSC) represents the 6,800 graduate students of the Massachusetts Institute of Technology (MIT) in all matters concerning their quality of life, academic opportunities, and professional careers after graduation. Consequently, we support all policies and developments that increase the availability, quality, and affordability of transportation services and infrastructure used by students. We further support all measures that strengthen federal funding for both basic and applied research and enable major scientific innovations. **We stress that such investments in research and development are essential to increase the competitiveness of our economy, to improve the overall infrastructure renewal process, and to support management and labor in bringing high-impact projects to completion.**

The development of smarter, cheaper, ecologically friendly infrastructure requires research across multiple disciplines to yield significant advances. Some examples of high-impact research topics in infrastructure include more efficient air travel, optimized electrical grids, novel transportation technologies such as self-driving cars or hyperloops, advanced construction technology like 3D-printed buildings, and self-sustainable and eco-friendly materials. MIT plays a leading role in developing these technologies by educating and developing students in the Schools of Engineering, Science, and Architecture and Planning that are eager to use their skills and energy to build the best possible America.

According to the American Society of Civil Engineers, it would take several trillion dollars of investment to rebuild the physical infrastructure in the US that is out of date, still in service beyond its planned lifetime, or structurally deficient. Given the scale of the challenge, investing in infrastructure-related research, alongside an investment in rebuilding physical infrastructure, is likely to yield significant innovation that leads to substantial cost savings.

Strong and sustained investments in scientific research and in the maintenance and development of physical infrastructure are both essential to maintain our quality of life and our national economic competitiveness. As such, if our elected officials proceed on a proposal to invest in improving America's physical infrastructure, **we urge them to include strong and sustained investments in basic scientific research and technology development to bolster these efforts.**

*Prepared by the External Affairs Board on behalf of the MIT Graduate Student Council.*