Rail Research and Development Center of Excellence

Problem/Issue Statement
Kansas State University transportation researchers in the Department of Civil Engineering have teamed up with two premier railroad research institutes in the United States to develop a Rail research and Development Center of Excellence led by the University of Illinois Urbana-Champaign. All three institutions have existing railroad research programs, mainly funded by the Federal Railroad Administration (FRA). Section 22413 provides language to create a center (described in the next section). The ask is that the final version of the FY22 THUD bill include a modified version of the Senate FY22 and/or FY23 language setting aside money specifically for the Rail R&D. This plus up request would allow for the creation of the center of excellence using new money allowing the FRA to continue to funded existing R&D programs such as the Broad Agency Announcement in which all three universities receive funding from.

Request Description
REVISED FY22 Senate THUD report language:
“Research Partnerships with Universities. - The Committee’s recommendation includes up to $5,000,000 for implementation of sec. 22413 (49 USC 20108 (j)), including $1,000,000 for research on intelligent railroad systems. This includes basic and applied research related to rolling stock; operational reliability; infrastructure; inspection technology; maintenance; energy efficiency; the development of rail safety technologies, such as positive train control; grade crossing safety improvements; and derailment prevention, particularly for trains carrying passengers and hazardous materials. Research conducted in conjunction with the FRA at universities should also be structured to facilitate the education and training of the next generation of professionals in rail engineering and transportation.”

IIJA Section 22413. Rail Research and Development Center of Excellence
This section establishes a Center of Excellence to advance research and development that improves the safety, efficiency, and reliability of passenger and freight rail transportation. This section authorizes the Secretary to issue grants in support of this program. The Center would support basic and applied research, including research on advances in rolling stock, advanced positive train control, human factors, inspection technology, and remote sensing. The Federal share of costs under this program would be 50 percent.

Request Goals and Expected Outcomes
Report language changed to “…include $5,000,000 for implementation of sec. 22413 (49 USC 20108 (j))…” to create a firm funding amount and have the total FRA R&D appropriations amount increased with a corresponding “plus-up”.

With the modified language, Kansas State University is expected to receive approximately $1.6 million of the $5 million dedicated to education, R&D, workforce development, and technology transfer. This funding will allow for the continuation of the existing railroad research center that is currently being funded under the FRA CRISI program.

Appropriations Subcommittee
Transportation, and Housing and Urban Development, and Related Agencies

Request Type
Funding Request ☒ Bill Language Request ☒