WHO WE ARE

The Physical Research Section of the Illinois Department of Transportation (IDOT) resides within the Central Bureau of Materials and Physical Research (BMPR). We impact all aspects of work at IDOT, providing the Department with innovative, evidence-based improvements and solutions that supply the citizens of Illinois with a cost-effective, efficient, and safe transportation system. We do this by developing, testing, and implementing new materials, products, and processes used in the design, construction, and rehabilitation of transportation facilities; conducting technology transfer; and directing and administering an in-house and contract research program consistent with the Division of Highway’s needs. Under a cooperative agreement with the University of Illinois at Urbana-Champaign, our contract research program is administered by the Illinois Center for Transportation (ICT) and headquartered at the Advanced Transportation Research and Engineering Laboratory in Rantoul, Illinois.

HOW WE ARE FUNDED

Federal State, Planning, and Research (SPR) Part 2 monies are used to cover IDOT’s participation in FHWA’s Transportation Pooled Fund (TPF) program (including our annual Transportation Research Board (TRB) and National Cooperative Highway Research Program (NCHRP) contributions) and fund the contract research program. A small amount of State funds are used to fund the administrative costs of the contract research program since SPR funds may not be used for this purpose. ICT and their subcontractors provide a match for the federal SPR funds at a rate of 25 percent to meet federal matching requirements for both research and planning activities.

FACILITIES

BMPR’s main offices and testing facilities are located at 126 East Ash Street in Springfield, Illinois. Our extensive testing facilities include AMRL-, CCRL-, and ISO 9001 accredited laboratories for Aggregates, Hot-Mix Asphalt, Concrete, Soils and Nuclear, Cement, Chemistry (separate Analytical, Asphalt, and Field Operations laboratories), and Metals and Miscellaneous Materials. A separate, off-site annex houses staff and non-destructive roadway testing equipment dedicated to the collection of data to determine the structural and surficial properties of the highway network in Illinois.

EXPERTISE – 4 UNITS

- **Bridge Investigations** – in-house consultant services for movable bridges, metallurgical, and corrosion engineering issues.

- **Pavement Technology** – developers of departmental pavement design procedures; in-house consultants for specialized pavement designs, rehabilitation strategies, and forensic analysis, as well as pavement friction questions.

- **Technical and Product Studies** – evaluation and development of new products, with an emphasis on practical field evaluations; implementation of findings through specifications and policy development.

- **Research Coordination** – eight standing research focus areas, including Construction; Environment; Pavement Design, Management and Materials; Planning; Public and Intermodal Transportation; Safety Engineering; Structures, Hydraulics and Geotechnical; and Traffic Operations and Roadside Maintenance.

STAFF

The core Research staff of 8 engineers, 5 technicians, and 2 technical managers is spread among the four units. Additional assistance with problem statement selection, research oversight, implementation, and technology transfer activities is provided by technical staff throughout the Department.
WHAT WE DO

The Physical Research Section is comprised of four units:

BRIDGE INVESTIGATIONS
Plans and conducts research and development studies related to the structural materials and components of bridges and other transportation structures.

PAVEMENT TECHNOLOGY
Studies and provides services related to the design and physical components of pavements and highways.

CONTACT INFORMATION
Amy M. Schutzbach, Engineer of Physical Research
Illinois Department of Transportation, Bureau of Materials and Physical Research
126 East Ash Street, Springfield, Illinois 62704-4766
(217) 782-7200