



## Bundesanstalt für Straßenwesen (BAST) Federal Highway Research Institute


Federal Highway Research Institute



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### Federal Highway Research Institute (BAST)

- Technical and Scientific Research Institute
- Responsible to the Federal Ministry of Transport, Building and Urban Development (BMVBS)
- Approximately 400 Employees
- Place of Training and Education


#### Responsibilities

- Scientifically Sound Decision Support on Technical Issues and Questions of Traffic Policy for the Ministry
- Drawing up of Regulations and Standards at National and European Level

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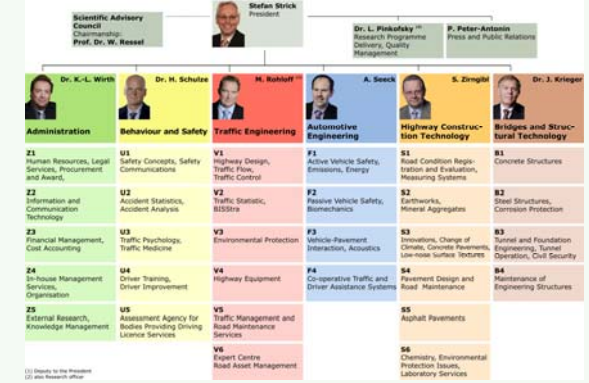
### Location and Tasks



- Founded in 1951
- Since 1983 in Bergisch Gladbach-Bensberg near Cologne
- Offices and Laboratories
- 10 Halls with Testing Facilities
- Research
- Advice
- Tests
- Standards

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### Administration



- Human Resources, Legal Services, Procurement and Award
- Information and Communication Technology
- Financial Management, Cost Accounting
- In-House Management Services, Organisation
- External Research, Knowledge Management

### Staff Positions



- Research Programme Delivery, Quality Management
- Press and Public Relations

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### Behaviour and Safety

- Safety Concepts, Safety Communication
- Accident Statistics, Accident Analysis
- Traffic Psychology, Traffic Medicine
- Driver Training, Driver Improvement
- Assessment Agency for Bodies Providing Driving Licence Services

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### Traffic Engineering

- Highway Design, Traffic Flow, Traffic Control
- Traffic Statistics, BISStra
- Environmental Protection
- Highway Equipment
- Traffic Management and Road Maintenance
- Expert Centre Road Asset Management

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### Automotive Engineering

- Active Vehicle Safety, Emissions, Energy
- Passive Vehicle Safety, Biomechanics
- Vehicle-Pavement Interaction
- Co-operativ Traffic and Driver Assistance Systems

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### Bridges and Structural Technology

- Concrete Structures
- Steel Structures, Corrosion Protection
- Tunnel and Foundation Engineering, Tunnel Operation, Civil Security
- Maintenance of Engineering Structures

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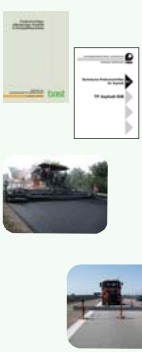


### Highway Construction Technology

- Road Condition Registration and Evaluation, Measuring Systems
- Earthworks, Mineral Aggregates
- Innovation, Climate Change
- Dimensioning and Maintenance of Roads
- **Asphalt Pavements**
- Chemistry, Environmental Protection Issues, Laboratory Services
- Concrete Pavements, Low-noise Surface Textures

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### Section Asphalt Pavements – Permanent Activities




- Carry out own projects
- National committees  
FGSV-committees Working Group 7 Asphalt pavements
- International committees  
CEN, bi- and multinational working groups
- Supervision of external research
- Setting up exploratory test sections on roads
- Statements for ministry (BMVBS) and third parties

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### Section Asphalt Pavements – Current research activities

- Project PAST (Prozesssicherer automatisierter Straßenbau (process-secured automated road construction))
- Performance-testing (lab - plant - layer)
- Multiple binder modification
- Use of rejuvenators
- Reduction of temperatures e.g. by using additives
- Low noise asphalt pavements

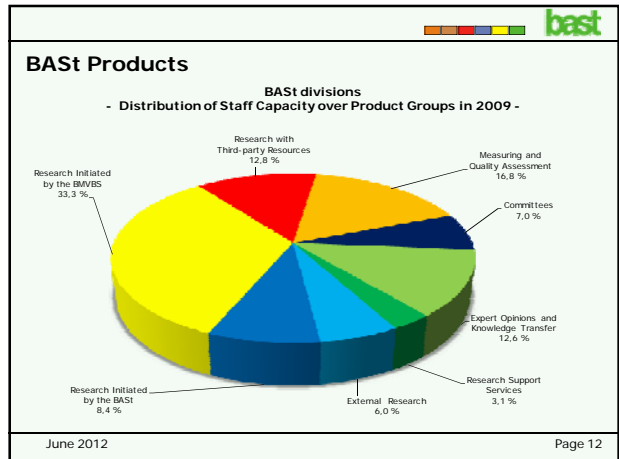
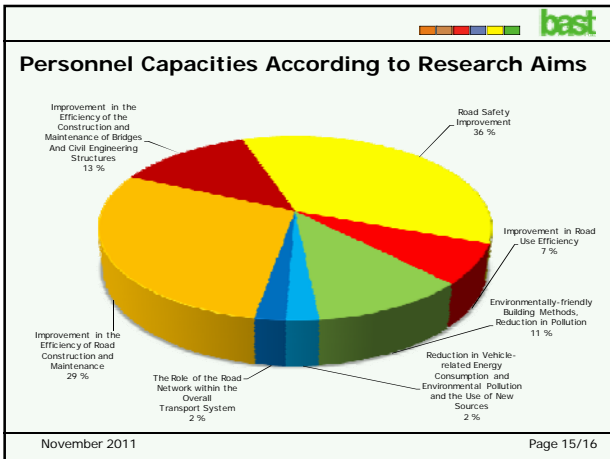
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### Research Aims

- Improvement in the Efficiency of Road Construction and Maintenance
- Improvement in the Efficiency of the Construction and Maintenance of Bridges and Civil Engineering Structures
- Road Safety Improvement
- Improvement in Road Use Efficiency
- Environmentally-friendly Building Methods, Reduction in Pollution
- Reduction in Vehicle-related Energy Consumption and Environmental Pollution and the Use of New Sources of Energy and Alternative Drive Concepts
- The Role of the Road Network within the Overall Transport System

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### BASt Financial Resources

• Annual Budget of BASt	36.3 Million Euro
• Resources from the Research Budget of the Federal Ministry of Transport, Building and Urban Affairs	5.1 Million Euro
<b>Total</b>	<b>41.4 Million Euro</b>

As per: 2009

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