

Lifetime Prediction Model

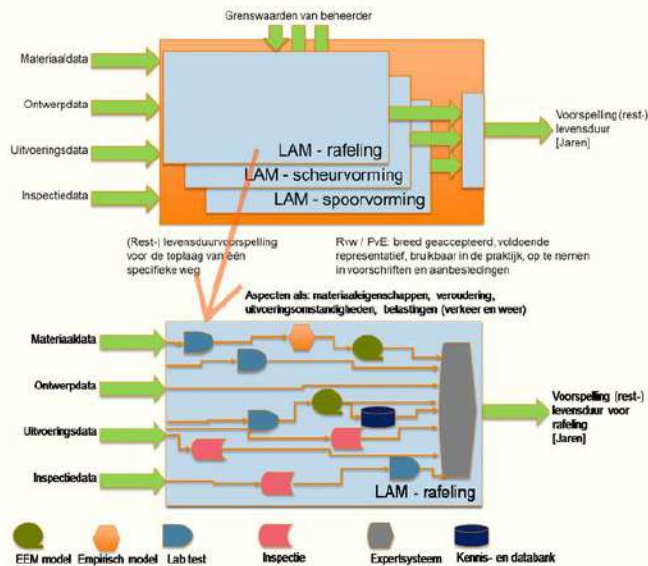
"Prediction of residual asphalt lifetime furthers sustainability and enables innovations"

Short description

- Uses data from **numerous sources**
- **Determines residual lifetime** of asphalt
- **Better predictions** with Bayesian model
- **Combining** various data sets

Features

- **Output** is residual **lifetime** with a **standard deviation**
- **Damage types** include skid resistance, raveling, rutting, and bearing capacity
- **Data sets** originate from **databases**, e.g. road network data, road condition data, and in car data.



Benefits

- **Linking lab data to road practice**
- **User data comparison improves asset management**
- **Calibration** of lab based models with field data
- **Insight** in middle and long time span maintenance **optimises budgeting** and **resource allocation**

Limitations

- **No experience yet with linking different prediction results**
- Data may need to pass **justification process**
- Structural asphalt life cannot be very **precisely predicted** with non-destructive measurements

Applicability

The dashboard will be available to all partners

Transnational and cross domain potential

Large potential for use: asphalt is everywhere & possible use in Germany based on asphalt data

Position on the data enrichment cycle

Data analysis

The Lifetime Prediction Model is used for the prediction of the remaining useful technical lifecycle

