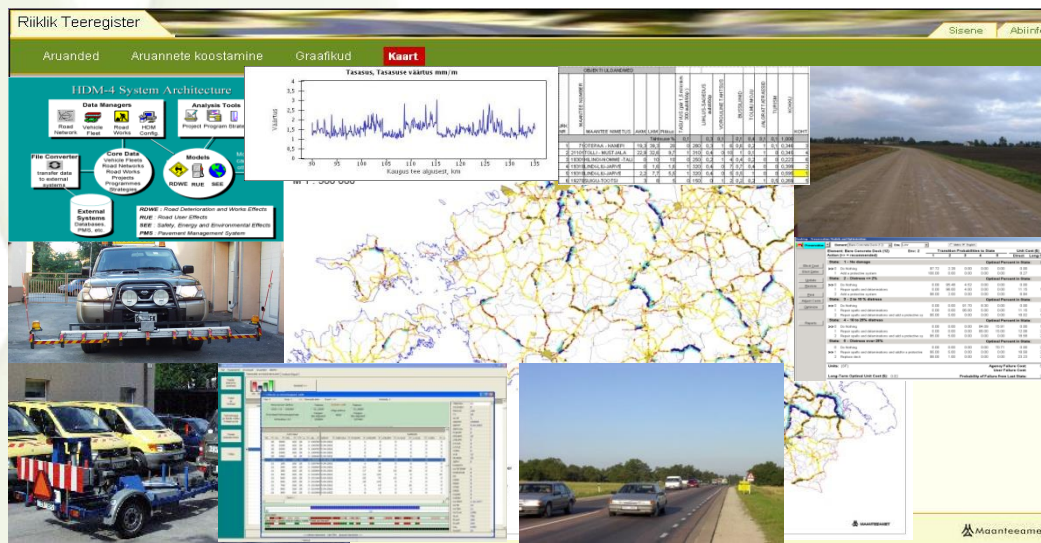




Estonian Road Administration

Estonian AMS



Jaan Ingermaa

Head of Road Network Department

General Facts

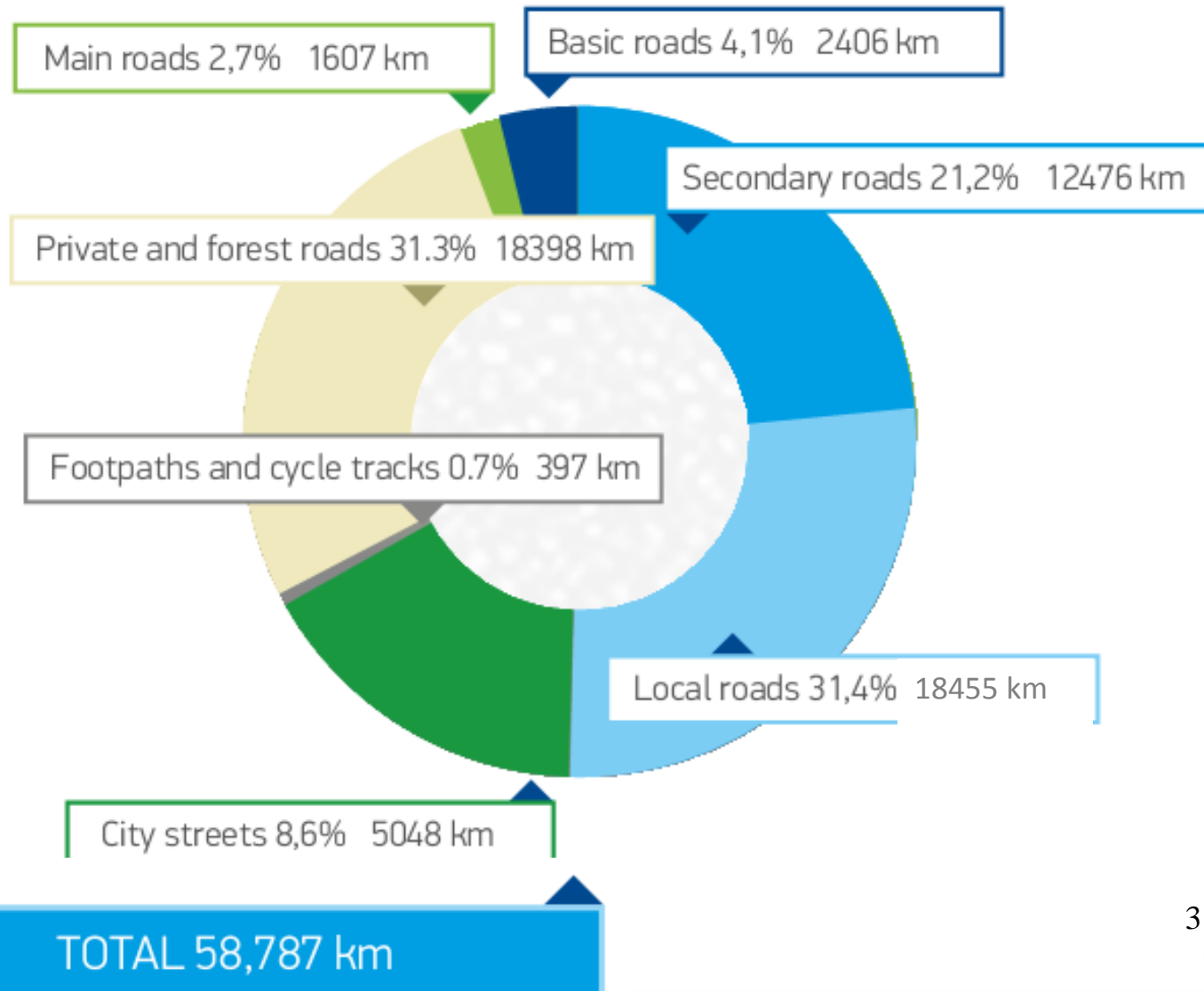
- Area: **45,228 km²**
 - Population: **1,3 million inhabitants** (30 per sq.km);
 - **~55% of all cargo by rail transport**
 - **~90% of all passengers travel by road**
- 631 000 vehicles** (471 veh/1000 inh.) and **>550 000 drivers.**

Roads :

- **58 787 km of roads and streets, incl. national roads**
- **16 489 km National roads:**
 - **995 km- E-roads**
 - **1342 km – TEN-T roads**
 - **140 km - I class roads**
 - **983 bridges (23,136 m)**



Road Network



Road Master Plan Principles

- Making the “**right investment at the right place at the right time**”
- Estonian road network is well established with sufficient density;
- Considering road condition - attention to road maintenance: according to the possibilities reconstruction and building is carried out.
- The goal on main road:
 - keep road condition,
 - improve safety and traffic flow
- The goal on basic and secondary roads:
 - reduce 10% poor and very poor condition of roads by 2020

Road Master Plan 2014-2020

Implementation

- RMP Goal – to reduce backlog;
- Goal Achievement – pavement repair work 2200 km per year
- Allows approx 7 year period pavement renovation
 - 65% surface dressing works
 - 17% gravel roads preservation works
 - 18% pavement renewal

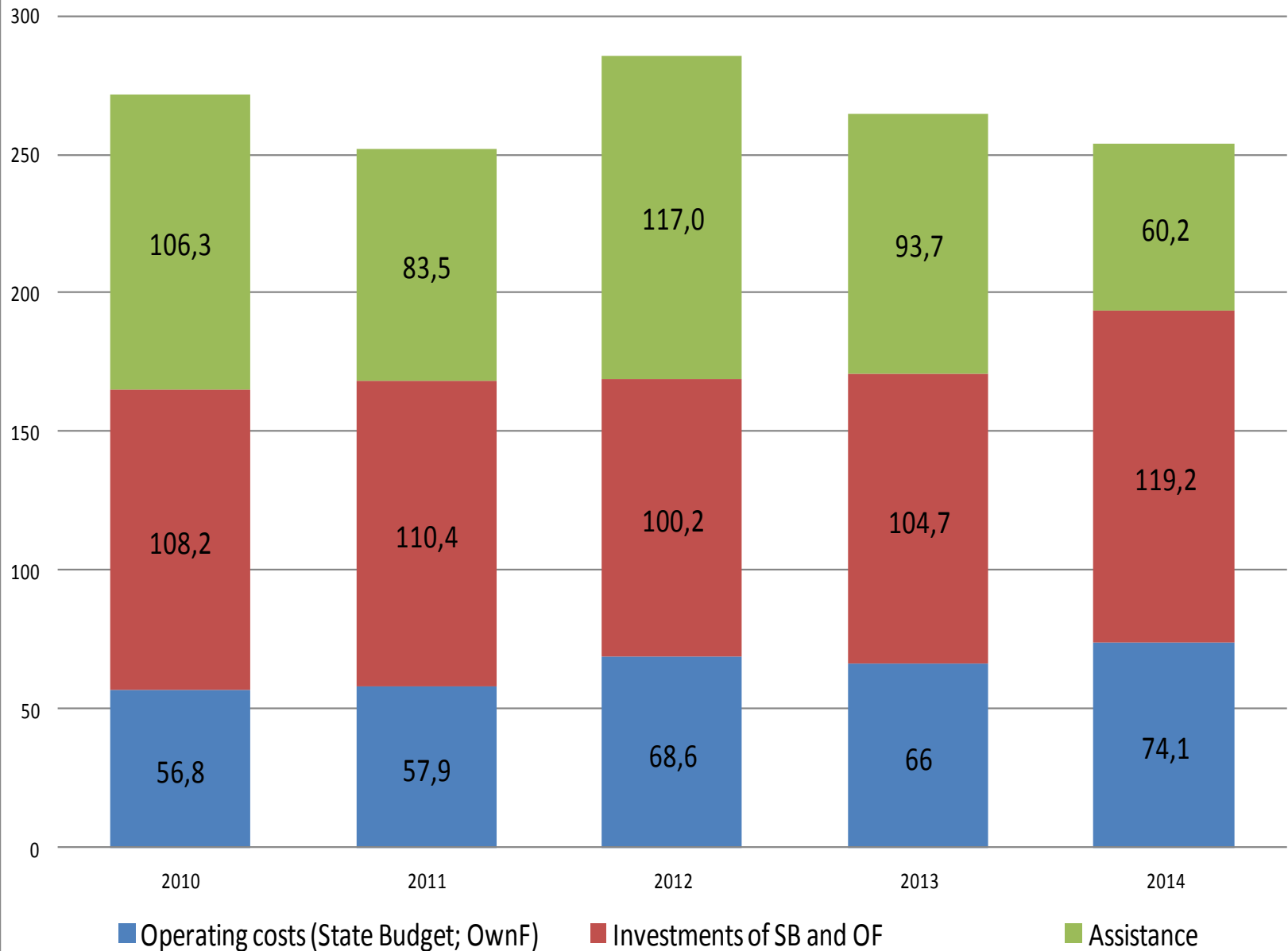
Analysis

- Basic data from Road databank –
for different works different data
- Tools - EPMS, HDM-4, Pontis, ArcGIS, ...

Analysis:

- Strategic analysis of national roads
- Surface dressing works
- Resurface works
- Reconstruction works
- Gravel road paving works
- Bridge condition (target - optimum condition 2022)
- Traffic safety

FINANCING OF NATIONAL ROADS IN 2010- 2014



Financial budget of Road Master Plan 2014-2020

	2014	2015	2016	2017	2018	2019	2020	TEUR
Planned receipt of fuel excise duty (02.09.13 prognosis)	400,000	408,000	420,000	430,000	440,000	450,000	460,000	
Estimate for road management as to RA §16	280,125	285,725	294,350	301,175	308,175	315,225	322,200	
For funding local roads								
10% of amount estimated for road management	28,013	28,573	29,435	30,118	30,818	31,523	32,220	
2007-2013 external funding	14,030	3,700	0	0	0	0	0	
2014-2020 external funding (estimated prognosis)	0	0	3,000	5,000	5,000	10,000	10,000	
For local roads in TOTAL	42,043	32,273	32,435	35,118	35,818	41,523	42,220	
Overall amount planned for national road maintenance	288,088	253,453	261,915	266,058	272,358	273,703	279,980	
ROAD MANAGEMENT WORKS								
Road maintenance	48,555	50,376	53,623	57,091	58,511	59,966	61,458	
Gravel road preserv. repair up to 400 km / year	6,180	6,336	6,493	6,656	6,823	6,992	7,167	
Paved road preserv. repair 1200-1500 km / year	22,301	22,837	23,408	23,993	24,593	25,208	25,838	
Paved road restor. repair 150-200 km / year	27,500	28,188	28,892	29,614	30,355	31,114	31,892	
Repair of bridges up to 35 bridges / year	8,629	8,845	9,066	9,292	9,525	9,763	10,007	
Reconstruction	43,209	44,616	44,252	37,998	38,876	38,686	42,291	
Road network preservation in TOTAL	156,374	161,197	165,734	164,645	168,682	171,729	178,652	
Preparation of projects	5,000	5,000	7,000	7,000	8,000	8,000	9,000	
Execution of the action plan for mitigation of the negative impact of noise	500	1,500	2,000	2,050	2,101	2,154	2,208	
Reconstruction of hazardous traffic sites	7,000	8,000	8,200	8,405	8,615	8,831	9,051	
State programme "Estonian roads dust-free by 2030" 2014 up to 50 km. 2015 up to 100 km. From 2016 up to 150 km	4,000	7,900	15,315	15,725	16,146	16,581	17,049	
Construction	43,635	47,743	41,000	45,000	45,000	42,000	39,000	
Development of road network in TOTAL	60,135	70,143	73,515	78,180	79,862	77,565	76,308	
Administration	21,574	22,113	22,666	23,233	23,814	24,409	25,019	
Administration in TOTAL	21,574	22,113	22,666	23,233	23,814	24,409	25,019	
ROAD MANAGEMENT WORKS in TOTAL	238,083	253,453	261,915	266,058	272,358	273,703	279,980	

Maintenance contracts



- Contracts are performance based (18 contracts)
- Since 2013 duration of contracts – 5 years
- Contractors are responsible for maintaining and managing road assets to a predefined levels of services
 - Levels of services are determined with Regulation of the Minister of Economic Affairs and Communications

Road network preservation works

- **Preservation repair of gravel roads**— up to 400 km
- **Preservation repair of paved roads**— 1200-1500 km

The main working method for the preservation repair of paved roads is surface dressing.

- **Restoration repair of paved roads** — 150-200 km

In the restoration repair of paved roads the upper layer of the existing surface structure is renewed by repaving or milling and new installation. As a rule, restoration repair is performed on roads with asphalt concrete surfacing.

- **Repair of bridges**— up to 35 bridges
- **Reconstruction** — up to 100 km

Reconstruction covers rebuilding or restoration of the load-bearing structure of the road together with other road facilities and improvement of traffic safety.

Road network development works

- **Preparation of projects**

- **Execution of the action plan for mitigation of the negative impact of noise (noise barriers - up to 2 km)**

- **Reconstruction of hazardous traffic sites**

Hazardous traffic spots, dangerous intersections; construction of new bus stops; construction of the new cross-overs; foot- and bicycle paths; improvement road lighting; other safety investments.

- **Construction of national roads**

Construction of roads contribute to safer traffic, increased road capacity, which in turn promotes transit traffic, improves the environmental condition or promotes regional development. Construction objects are selected on the basis of a socio-economic efficiency. The list of objects is drawn up for 7 years.

- **National programme "Estonian roads dust-free by 2030"**

The objects are determined and ranked, taking into account traffic density, heavy traffic, impact of dust, road users, significance to network, existence of bus lines, bicycle routes and cost-effectiveness.

Investment Committees

- For reviewing and approval of selected repair objects and planned works, the Estonian Road Administration has formed so-called investment committees, which consist of central and regional executives.
- The committees are authorised to decide over the implementation or rejection of one or another investment.
- There are:
 - Investments Committee I - Network Committee
 - Investments Committee II - Safety Committee
 - Investments Committee III - Development Committee

Ice roads (the longest to Hiiumaa - 25 km)





Thank you!