

Latvian State Roads



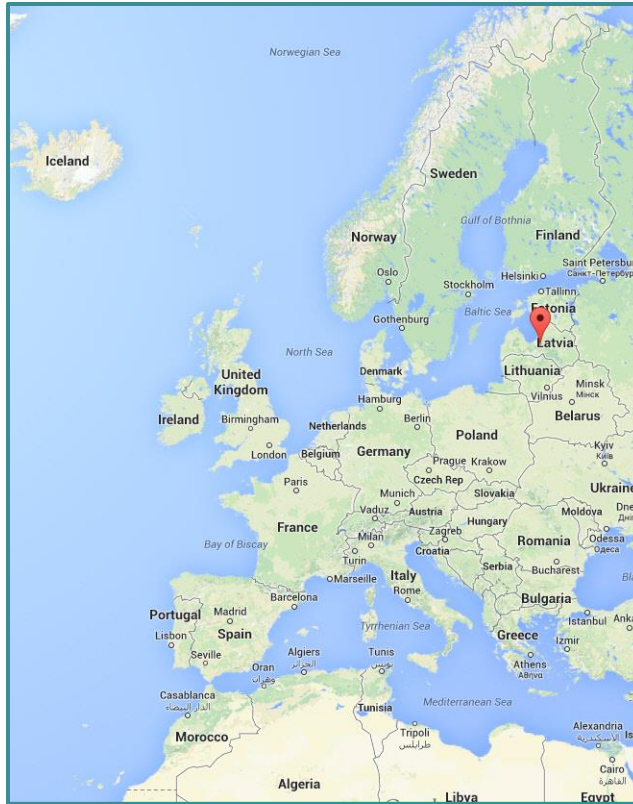
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UNECE TEM / HEEP Area V

2014 Annual Meeting, Vilnius



Latvia in Europe



Facts and Figures

- **Territory** of Latvia – **64 589 km²**
- **Population** (January 1, 2013) – **2 028 400**
- Total **length** of road and street network **72 440 km**
- **Density** of the road network is **1.122 km** per 1 km²
- State road network - **20 115 km**
- The average **density** of the state road network is **0.312 km** per km²



Facts and Figures

Road classes	State Road Network (as of January 1, 2013) kilometres			
	asphalt and other bituminous pavements	crushed-stone and gravel pavements	without pavement	total length of road network
State roads, including:	8563	11552	-	20115
Main roads (A)	1669	-	-	1669
Regional roads (P)	4231	1087	-	5318
Local roads (V)	2663	10465	-	13128



Facts and Figures

Bridges

The Latvian State Roads is responsible for **943** bridges, out of which:

- **880** reinforced **concrete** bridges;
- **14** stone **masonry** bridges;
- **43 steel** bridges;
- **6 wooden** bridges.

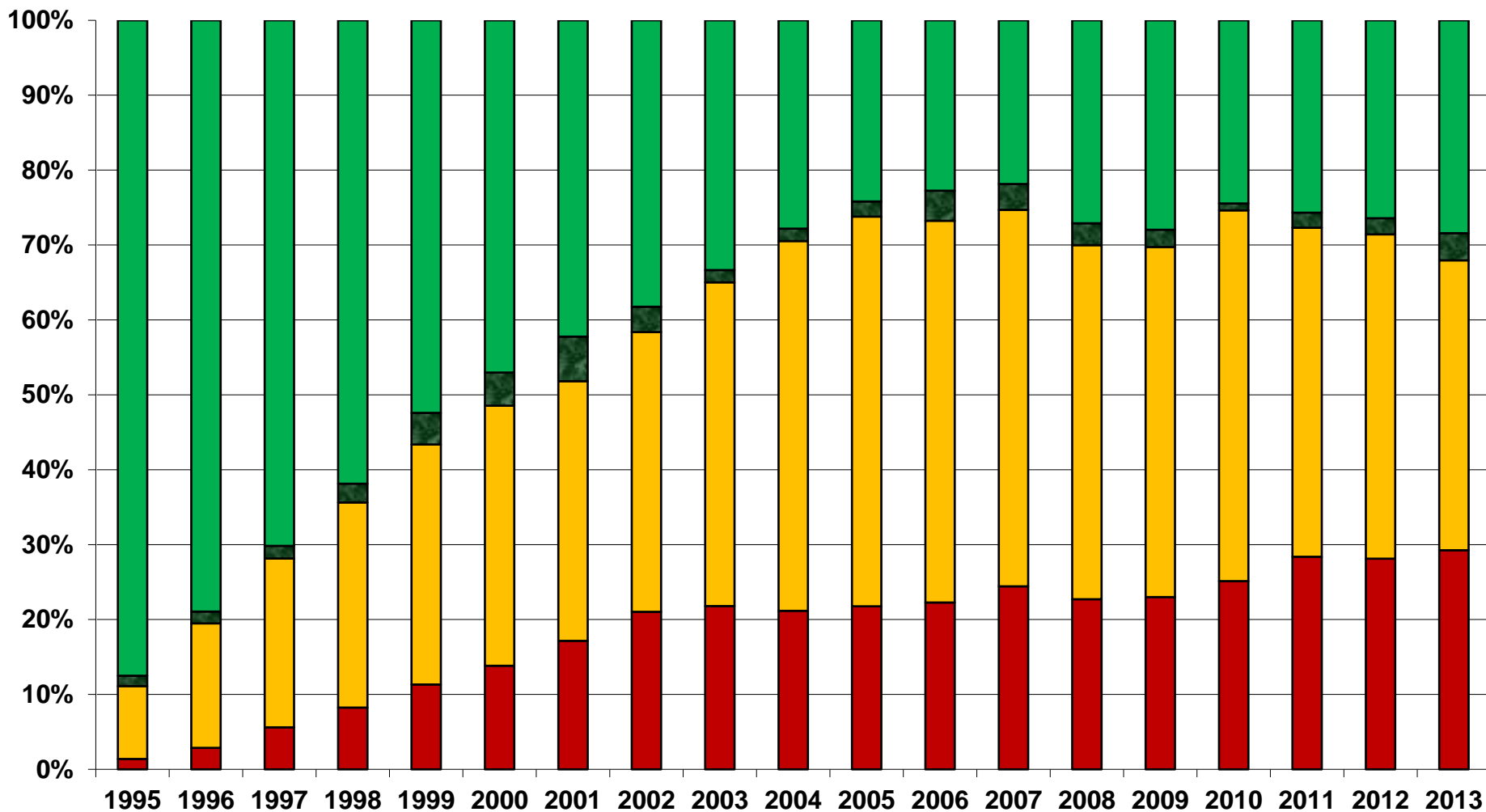
Total length of bridges - 30 484 metres.



Facts and Figures - Traffic intensity, 2013



Dynamics of Pavement Condition

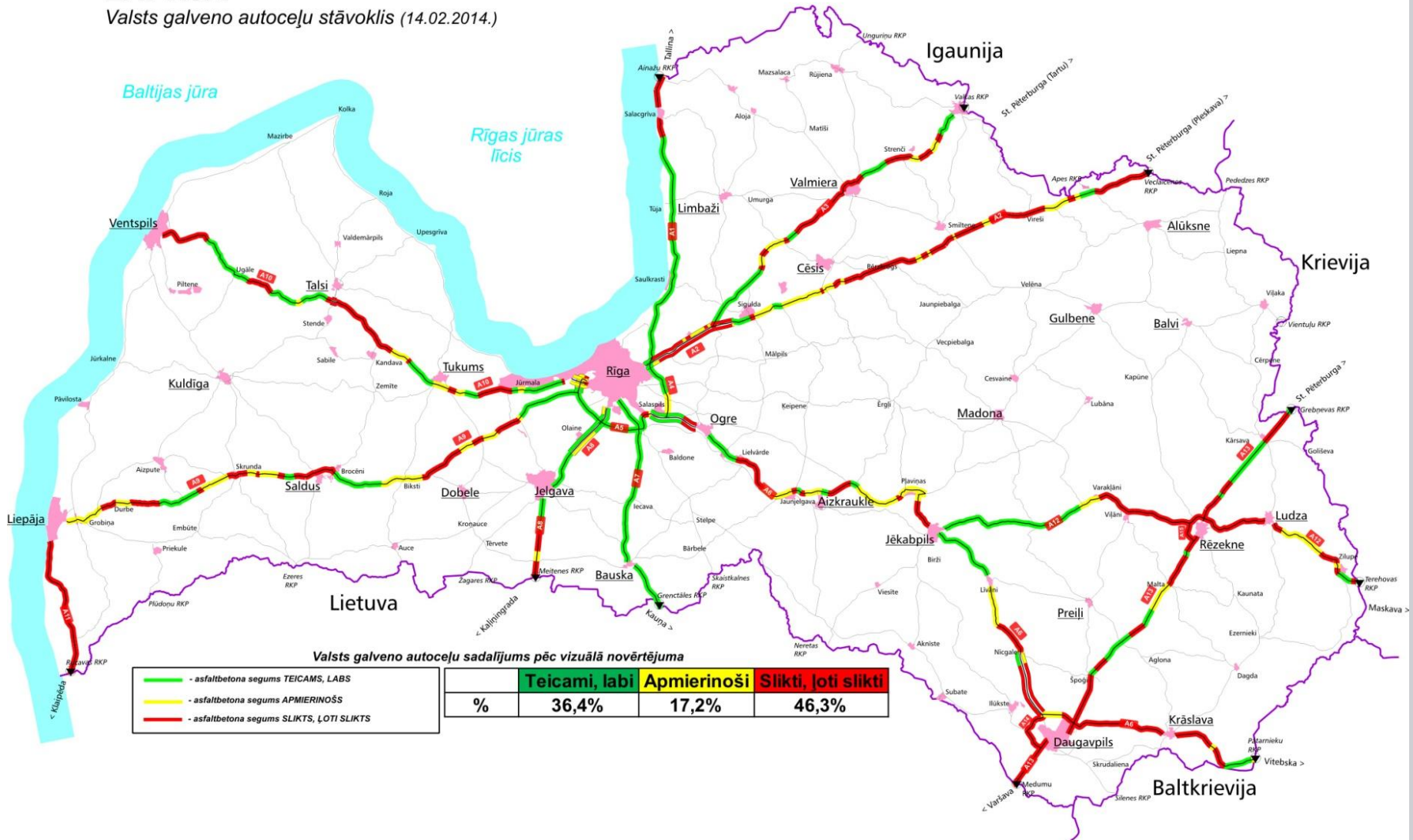


■ Segas ļoti sliktā stāvoklī (sabrukušās segas) ■ Segumi apmierinošā stāvoklī
■ Ilgadējais atjaunošanas apjoms ■ Segumi teicamā un labā stāvoklī

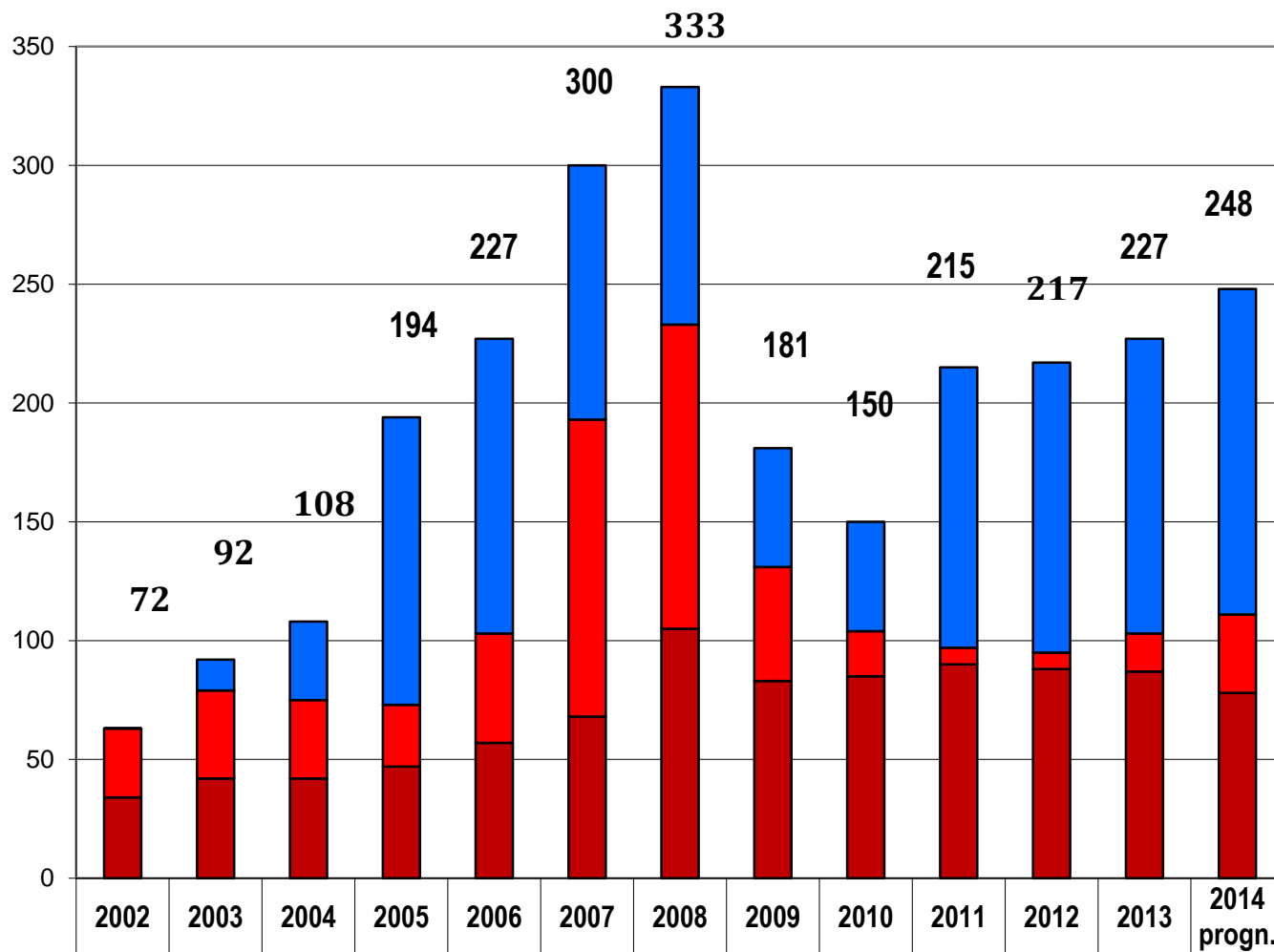
Facts and Figures – Road condition, 2013

LATVIJA

Valsts galveno autoceļu stāvoklis (14.02.2014.)

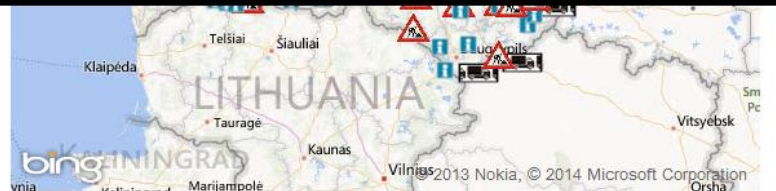
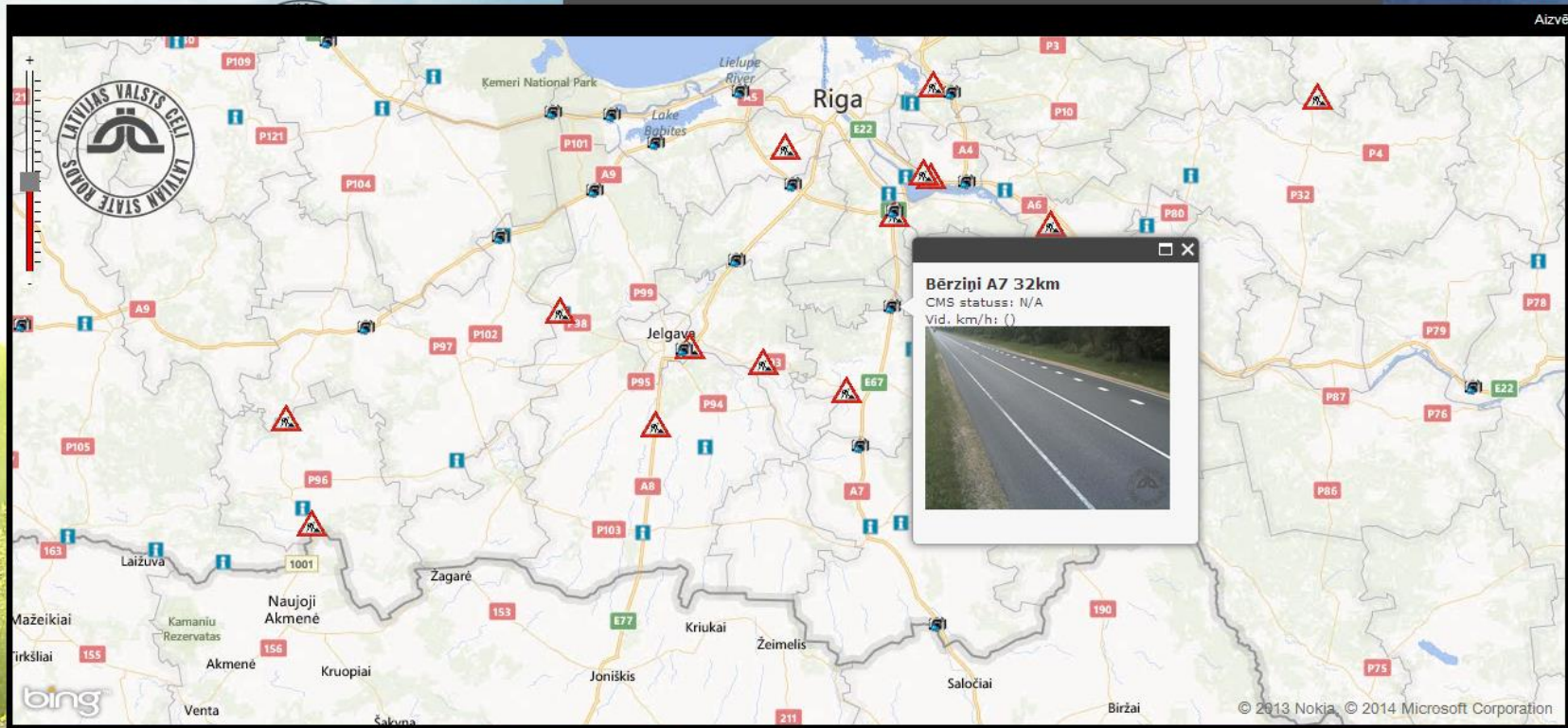


Road network financing 2002 - 2014 (million EUR)



ES finansējums KAPITĀLIE IZDEVUMI	0.06	13	33	121	124	107	100	50	46	118	122	124	137
Valsts autoceļu fonds KAPITĀLIE IZDEVUMI	29	37	33	26	46	125	128	48	19	7	7	16	33
Valsts autoceļu fonds UZTURĒŠANAS IZDEVUMI	34	42	42	47	57	68	105	83	85	90	88	87	78

ITS in Latvia (INTERnet)



ITS in Latvia (INTRAnet)

The screenshot displays a web browser window with the URL [http://kartes.lvceli.lv/lvc.net/\[GIS_FLEX\]/default..](http://kartes.lvceli.lv/lvc.net/[GIS_FLEX]/default..) and a tab titled "LVC.net > LĢIA pamatdati". The application header includes the logo "LĢIA pamatdati LVC karšu pārliuks" and a navigation menu with icons for "Intranets", "Dokumenti", "Reģistri", "BUVIS", "Kartes", "Satiksmes info", "Inventarizācija", and "SCDB". Below the header, a secondary menu shows "LĢIA pamatdati", "OSM un Bing", and "KM atzīmju ievade". The main content area is a map of Latvia with a legend overlay. The legend, titled "More...", lists several layers: "TILTI", "Kadastrs 2013 (jaunais)", "Kadastra poligoni 2011 (vecais)", "Perspektīvie projekti", "NNTIANT", "LVC pārliuks", and "LVC ceļu inventarizācija". The "LVC pārliuks" and "LVC ceļu inventarizācija" layers are checked. The map shows a network of roads in various colors (red, orange, green, blue) and includes labels for "Salaspils" and "Ikšķile". A scale bar at the bottom left indicates 3 km and 2 mi. The bottom right corner of the map area features the "esri" logo and the text "POWERED BY". The Windows taskbar at the bottom shows the system clock as 10:54 on 2014.06.16.



ITS in Latvia (core elements)

- TICs for state roads, Riga and Jelgava municipalities;
- data acquisition systems (RWIS, vide-surveillance, traffic counting ect.)
- control systems of telematics (traffic lighting and traffic lights);
- electronic ticketing in Riga and it's suburbans;
- multimodal planners (private services)

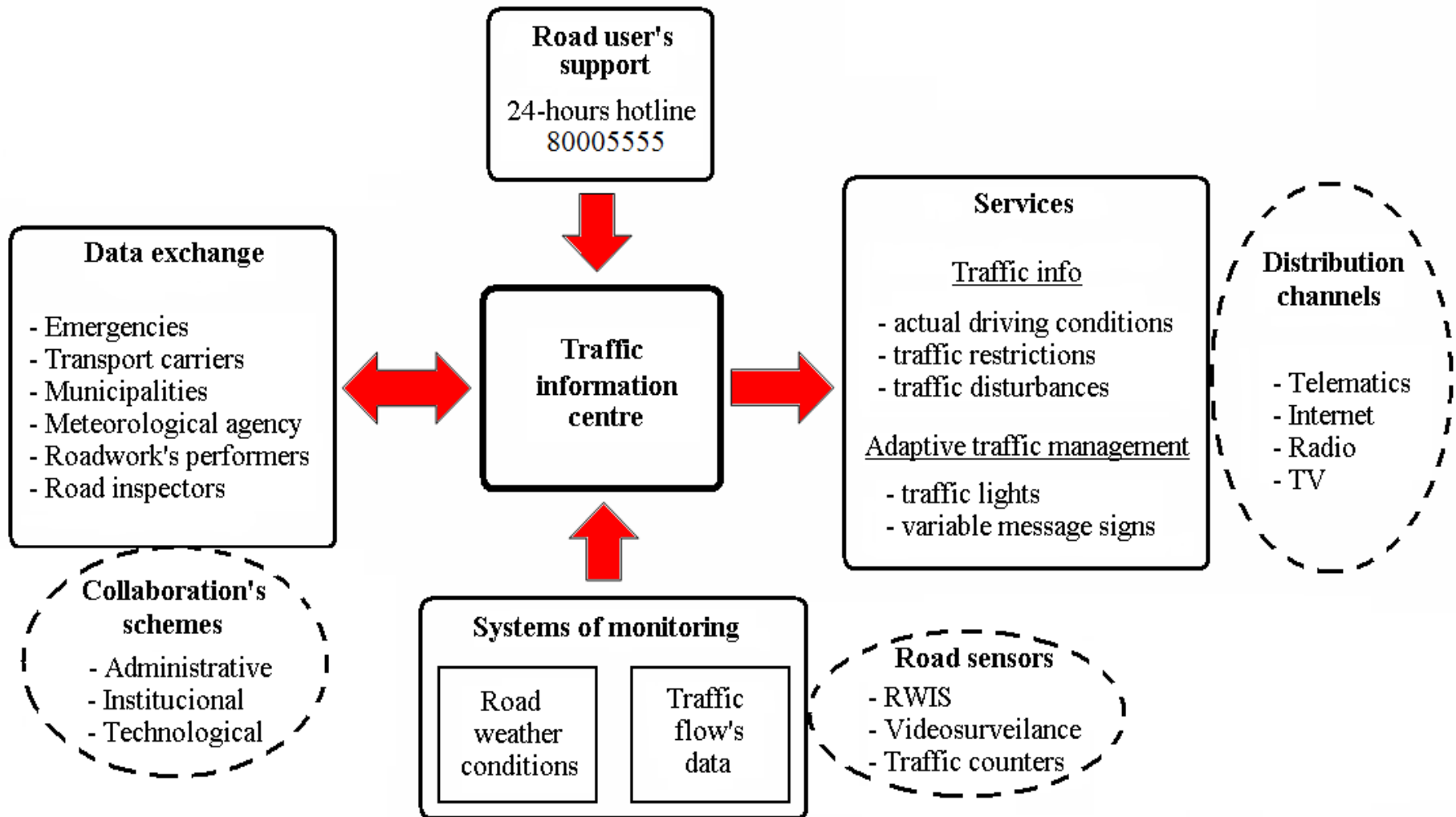


ITS in Latvia (nearest tasks)

- introduction of effective nationwide ITS data sharing platform (Datex II, cooperation procedures etc.);
- implementation of eCall service;
- rolling out of speeding and overweight enforcement systems;
- development of nowcasting at RWIS.



Traffic Information Centre (TIC) of Latvian State Roads



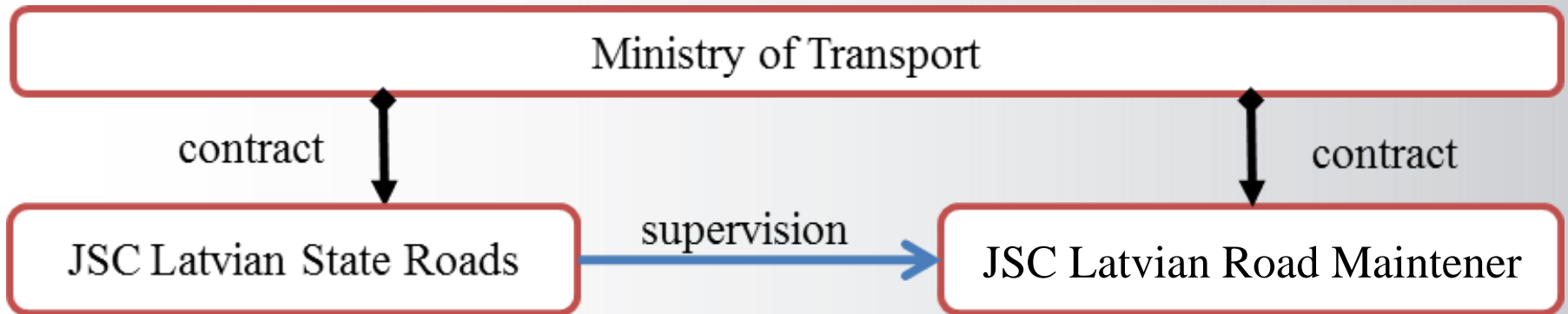
Main Tasks of TIC

Provided all the time 24/7:

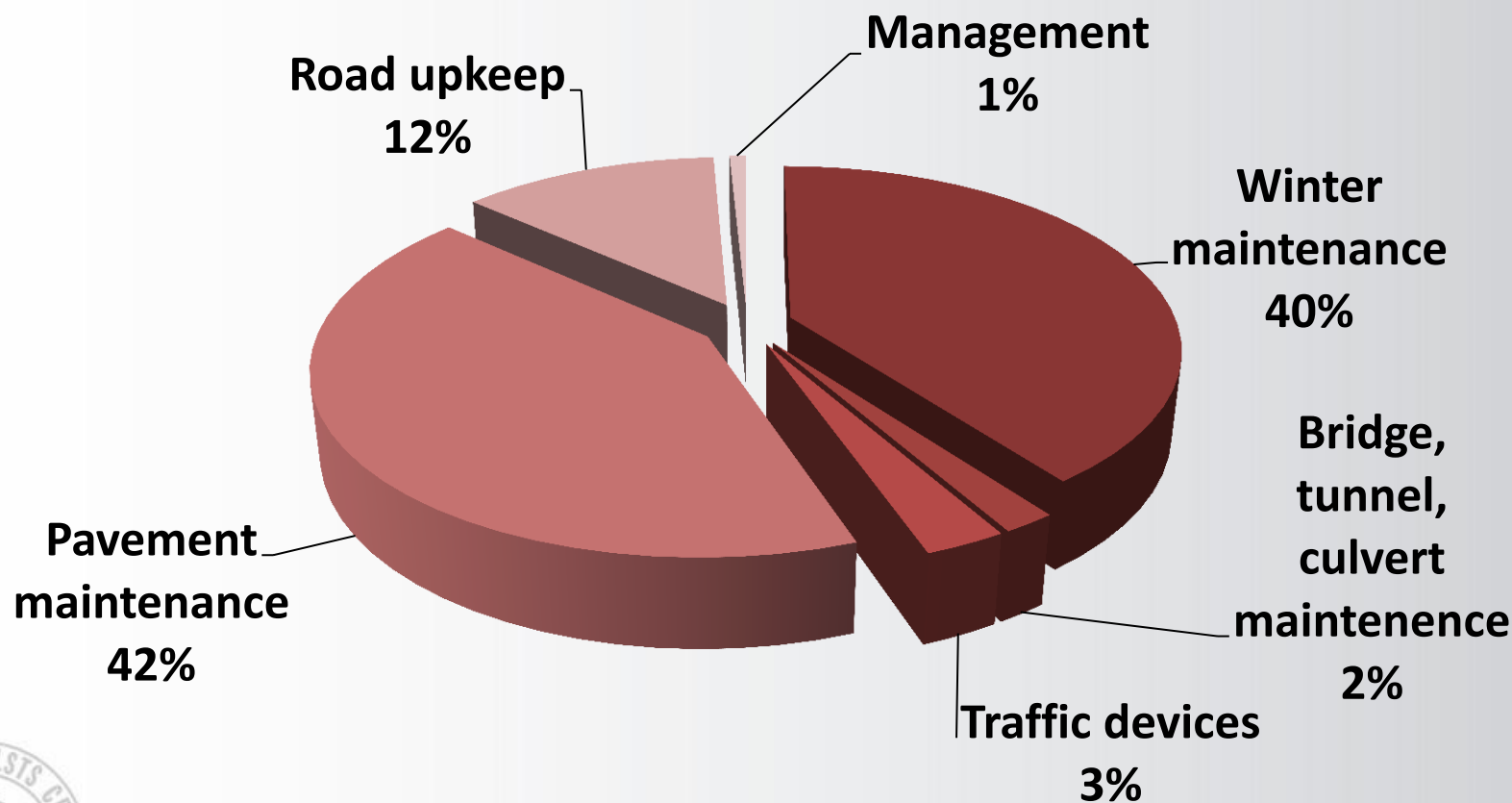
- traffic info handling (data processing, sharing to media etc.);
- consultation of road users (hotline, social networks and web chat).
- management of traffic disturbances and dangerous situations (negotiation between emergences and road work providers);



Road Routine Maintenance starting from 2014



Structure of Average Costs of Routine Maintenance Works - 2007 - 2012



History of asset management system in Latvia

Belman
(DRD)
1996

?
2014

Introduction
of HDM 4
~2000



AMS / PMS / BMS

- Bridge management system (BMS) is functioning
- AMS / PMS system components are in place...
 - Pavement condition assessment (data collection):
 - Roughness, rutting
 - Bearing capacity
 - Visual assesment of distresses
 - Asset registration system (GIS)
- ... but evaluation criteria has to be set



Challenges of AMS

- Redevelopment of deterioration models
- PMS is not applicable to the whole road network (condition of pavement)
- Systems integration (expansion of GIS)
- Political will to accept rules / results of AMS



Thank you for attention!

Sanita Muižniece and Jānis Barbars,
Latvian State Roads

