Winter Maintenance in Lithuania

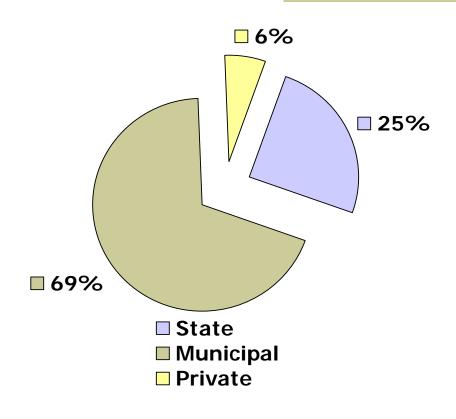
Henrikas Jurkuvėnas, Head of Road Maintenance Division

Lithuanian Road Network

CLIENTS FOR ROAD MAINTENANCE

- State roads (21300 km) – Lithuanian Road Administration
- Municipal roads (59100 km) municipalities
- Private roads (5000 km) owners

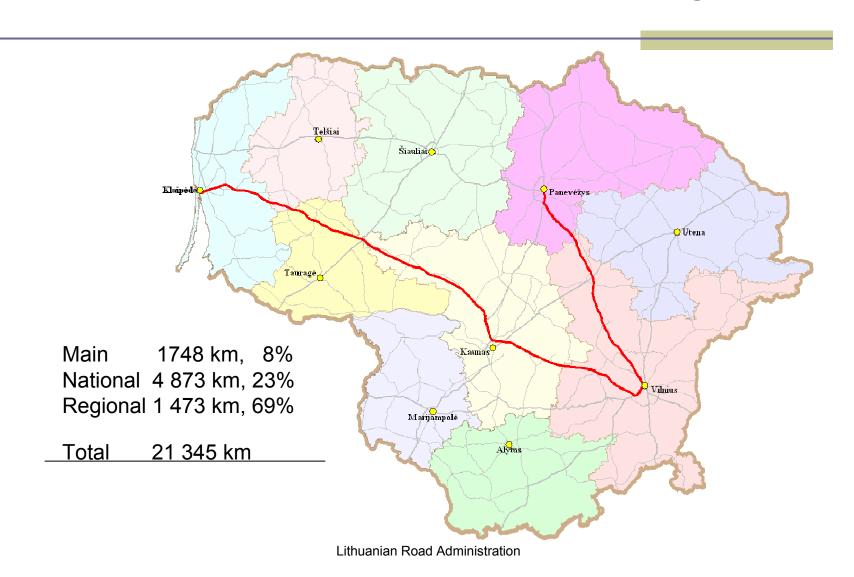
Total: 85400 km



Main documents

- Law on Roads
- Law on State and Municipal Enterprises
- Law on Financing the Road Maintenance and Development Programme
- Law on Public Procurement
- The Civil Law

State road network. Contract regions

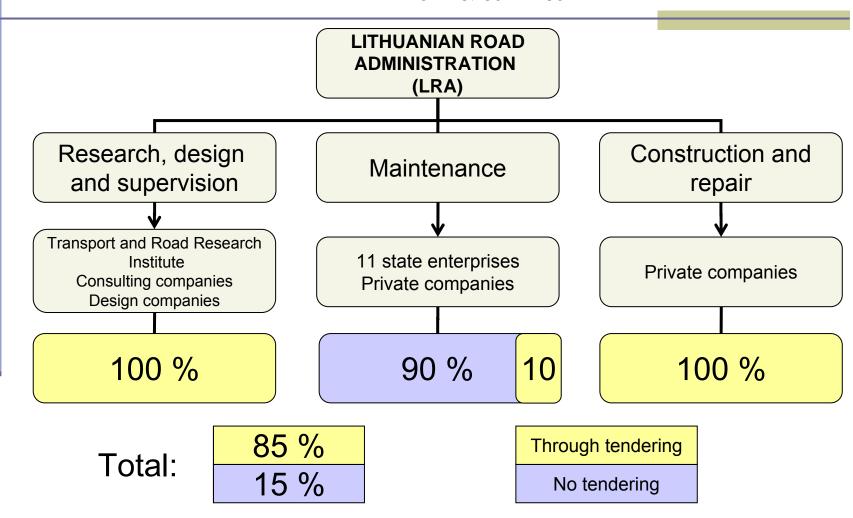


State road network. Contract regions

	Contract	Length of roads, km					
	regions	Main	National	Regional	Total		
1	Alytus	95	390	987	1472		
2	Kaunas	187	574	1919	2680		
3	Klaipėda	77	489	1520	2086		
4	Marijampolė	121	365	1084	1570		
5	Panevėžys	135	510	1798	2443		
6	Šiauliai	219	603	1690	2782		
7	Tauragė	66	337	833	1236		
8	Telšiai	67	345	900	1312		
9	Utena	158	572	1775	2505		
10	Vilnius	206	688	1946	2840		
11	Automagistralė	417	-	-	417		

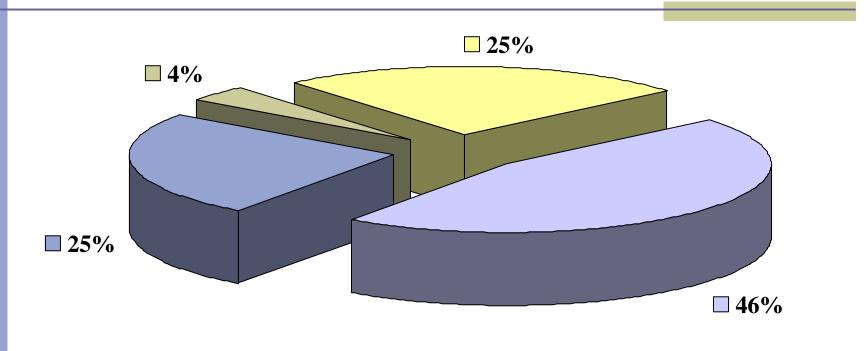
Lithuanian Road Administration

Procurement structure in Lithuania



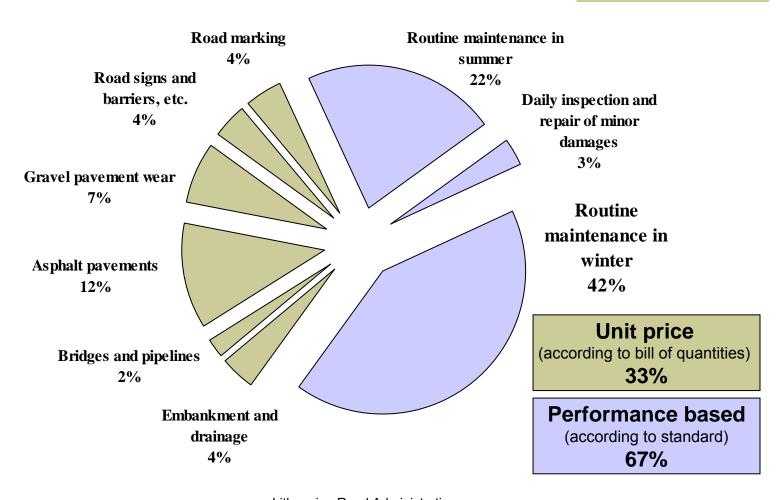
Lithuanian Road Administration

The structure of road expenditure, %



- **□** Road maitenance
- Road construction, reconstruction, repair
- **■** Local (municipal) roads
- \square Other expenditures

The structure of road maintenance contract



Lithuanian Road Administration

Documents of Road Maintenance Management System

1. STANDARD

levels, performance specifications

2. OPERATING TECHNOLOGIES

3. ECONOMIC RATES

according to levels

4. GUIDELINES

for technical supervision and take over

5. METHODOLOGY

of work accountancies

6. RATES OF RESOURCES

on the number of personnel, equipment, materials

Planning 1 3 6

Production 1 2 4 5

Supervision Acceptance

Preparation of road maintenance contracts

Planned road maintenance levels and quantities

Needs analysis (required funds)

Project approximation and its approval by the Ministry of Transport and Communications

Approval of the Road Maintenance and Development Programme by the Lithuanian Government

Preparation of 11 road maintenance contracts

Negotiation with contractors. Signing of contracts

Winter maintenance level in contracts of 2004/2005

Level	Implemented km	Share of	network, %	
I motorways	326	1.5	2.6	
I main	226	1.1	2.0	
II main	1 197	5.6		
II national	4 879	22.8	36.6	
II regional	1 742	8.2		
III regional	12 981	60.8	60.8	
Total	21 345	100		

Optimum levels according to "least damage estimation"

Optimum level	Km	Share of network, %			
I main	1 749	8.2			
I national	660	3.1	22.1		
I regional	2 313	10.8			
II national	4 213	19.8	58.9		
II regional	8 348	39.1			
III regional	4 062	19.0	19.0		
Total	21 345	100			

Performance specification of winter maintenance standard for main roads

		Period of time			Road condition			l _n :	
Level	Road Class	Service on duty	First snow removal/ spreading	Snow removal after snowfall	De-icing after ice occurs	No precipitation	Snow, freezing rain	Extreme conditions	Interrupted traffic
ı	Motorway	00-24	-	1.5 h	2 h	No slush	< 3 cm	< 3 cm	1 h
	2 lanes	00-24	-	2 h	2.5 h	No slush	< 4 cm	< 5 cm	2 h
II	Motorway	00-24	-	2 h	2.5 h	No slush	< 4 cm	< 4 cm	2 h
	2 lanes	04-22	6:00	3 h	3.5 h	No slush	< 5 cm	< 7 cm	3 h
III	Motorway	04-22	6:00	3 h	3.5 h	No slush	< 5cm	< 7 cm	3 h
	2 lanes	06-19	6:00	4 h	4.5 h	< 1 cm slush	< 6 cm	< 10 cm	4 h

Evaluation of road maintenance contracts

- Contracts include routine and small-scale periodic maintenance.
- Contracts consist of two parts: "performance specification" works (70%) and "unit price" works (30%).
- 90% of works are performed by state enterprises.
- Private contractors are involved in periodic maintenance, technical supervision of works, subcontracting.
- Contracts are signed for 1 year.

Advantages

- Smooth implementation of maintenance policy and the distribution of financial resources.
- Easy and cheap management.
- Small number of personnel.
- Adequate and well developed production capacities.
- Easily privatised system.

Problems

- Contracts cover only routine and small-scale periodic maintenance.
- No long-term maintenance tender documentation.
- No outcome-based criteria and performance specifications for the evaluation of road condition.
- Insufficient technical and intellectual background.
- No permanent road condition monitoring implemented.
- No reliable database of road evenness, rutting, defects, quality of signs etc.

Vision to procurement strategy in road maintenance

- Integrated client service—one contract for all types of routine and periodic maintenance works on a particular area.
- Long-term contracts.
- Simple and effective outcome-based criteria and performance specifications.

Immediate goals

- Preparation of tender documentation of long-term contracts for outcome-based criteria works.
- Development of the database.
- Development of outcome-based criteria and performance specifications.
- In-service training of the client and the contractor focusing on IT.
- Improving the legislative basis.

Thank you for your attention!