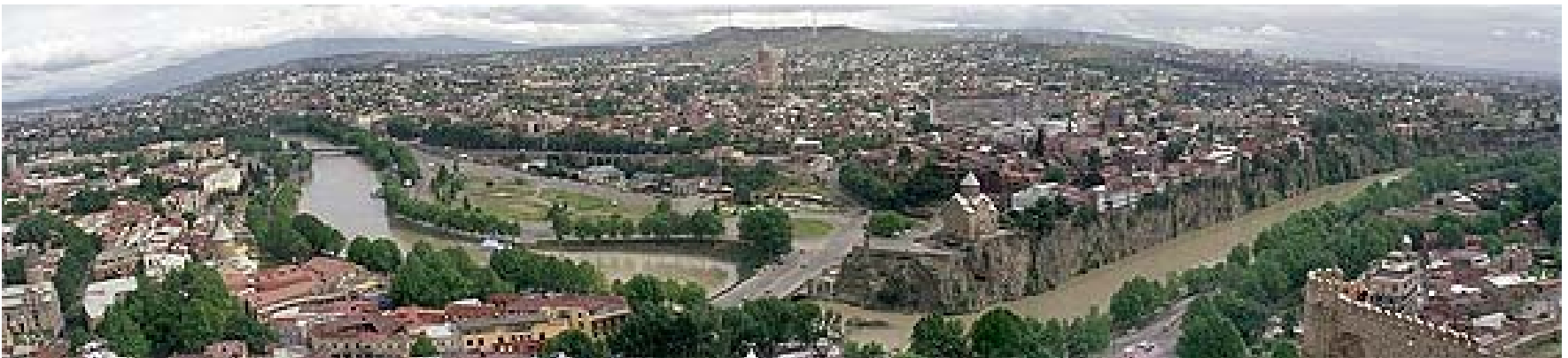


Workshop on Sustainable and Healthy Urban transport

Sustainable Transportation in Tbilisi: current challenges and way forward



*Mikheil Tushishvili, Head of Air Protection Division, Ministry of
Environment Protection and Natural Resources of Georgia*

29-30 October 2008, Chisinau, Moldova



Outline of the presentation

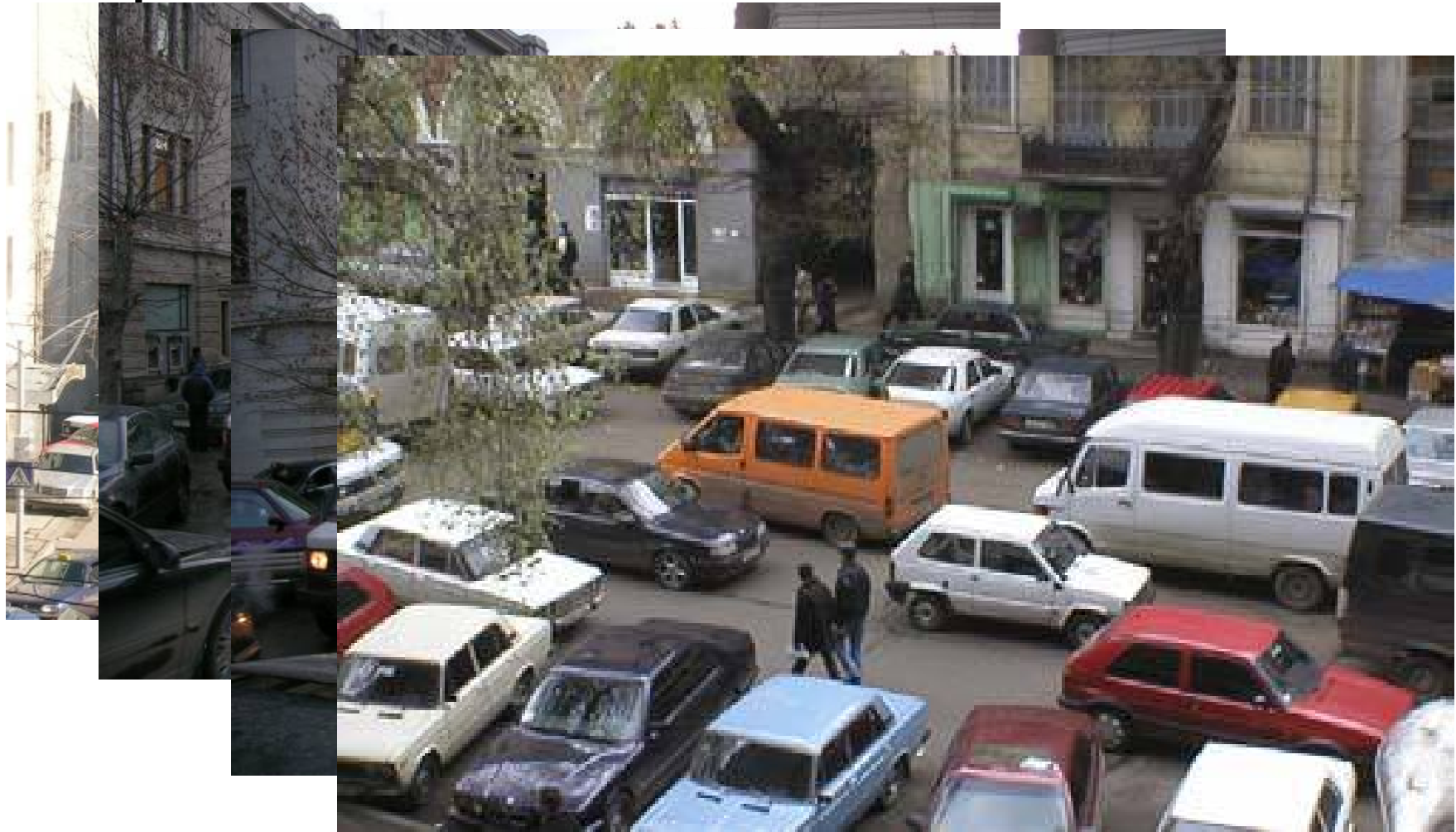
- Background information**
- Current challenges**
- Key barriers: Policy issues**
- Consequences of existing policy: Health and Environmental aspects**
- Positive transformations**
- Recommendations and way forward**



Background (1)

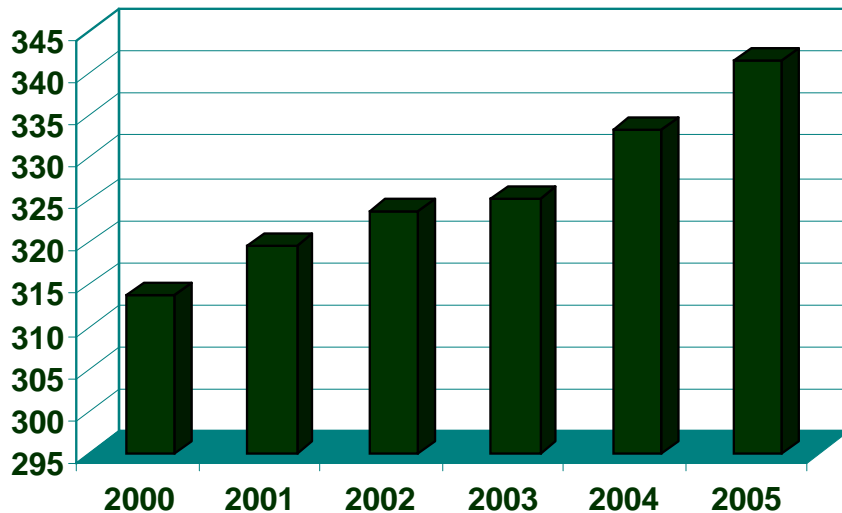
- ❑ **The urban population in Georgia continues to increase;**
- ❑ **Tbilisi, with its 1,5 millions inhabitants, is home to more than 30 per cent of the population of Georgia;**
- ❑ **Mobile sources are responsible for an increasing share of total air emissions in Tbilisi, their contribution rising from 70% in 1991 to about 91% in 2005;**
- ❑ **Tbilisi is heavily overloaded by vehicles especially the old part with narrow streets;**
- ❑ **In 2000, 80 vehicles per 1000 inhabitants. In July 2005, 100 vehicles per 1000 inhabitants;**
- ❑ **Insufficient organization of traffic and parking increases congestions and air pollution problems.**

Background (2)

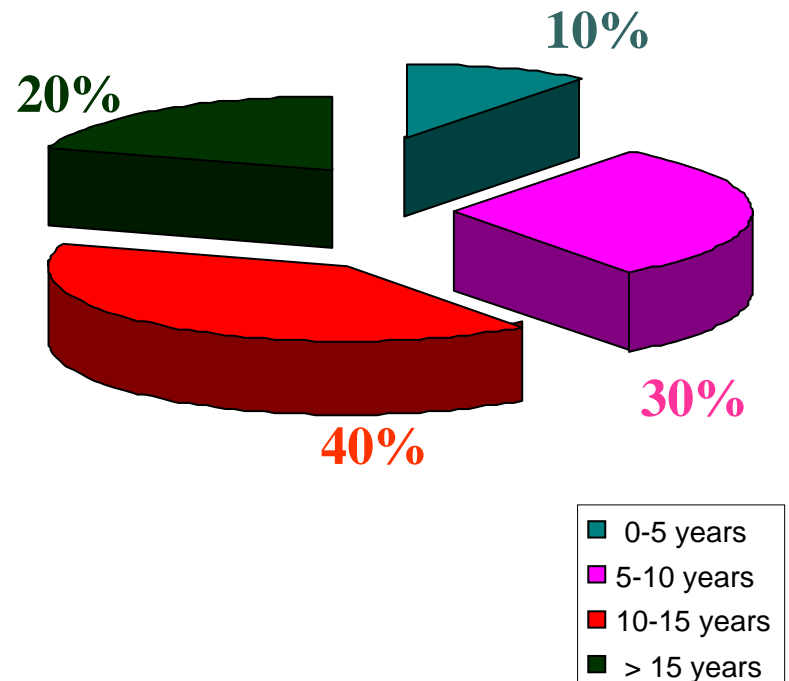


Current challenges: description of fleet in Georgia (1)

Total moto-vehicles in Georgia (ths)



Age profile of vehicles (%)



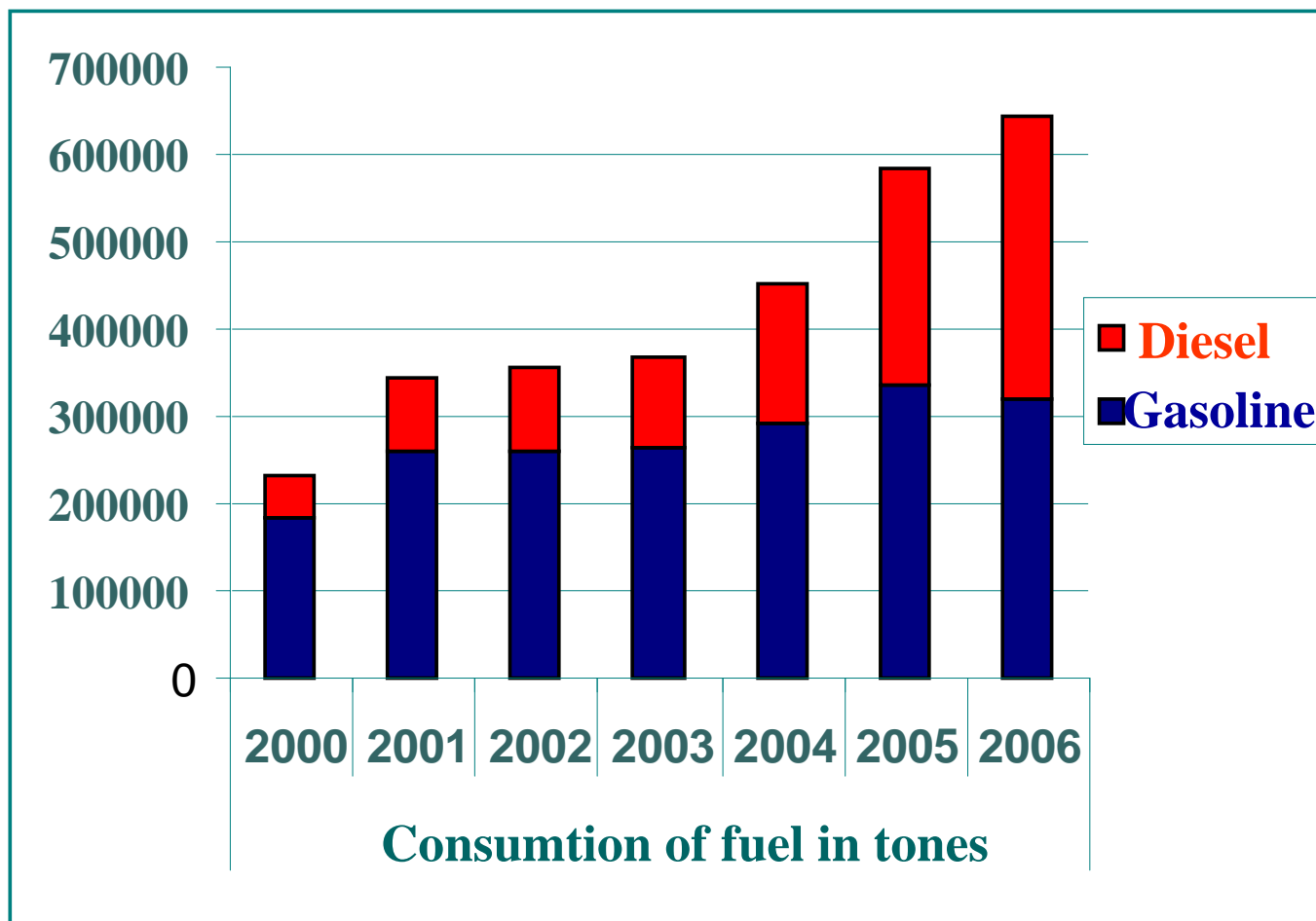
Source: Department of Patrol Police of the Ministry of Internal Affairs of Georgia



Current challenges: description of fleet and related challenges in Georgia (2)

- ❑ The number of second-hand European cars has significantly increased;**
- ❑ Catalytic converters are often destroyed or removed from imported cars;**
- ❑ The share of Soviet-made cars is still high but it is decreasing;**
- ❑ The inefficient car service system;**
- ❑ The servicing is often performed by car mechanics without any special qualification or by garages without any certificate;**
- ❑ There are no restrictions on the age of vehicles on the road, not even in the public transport sector.**

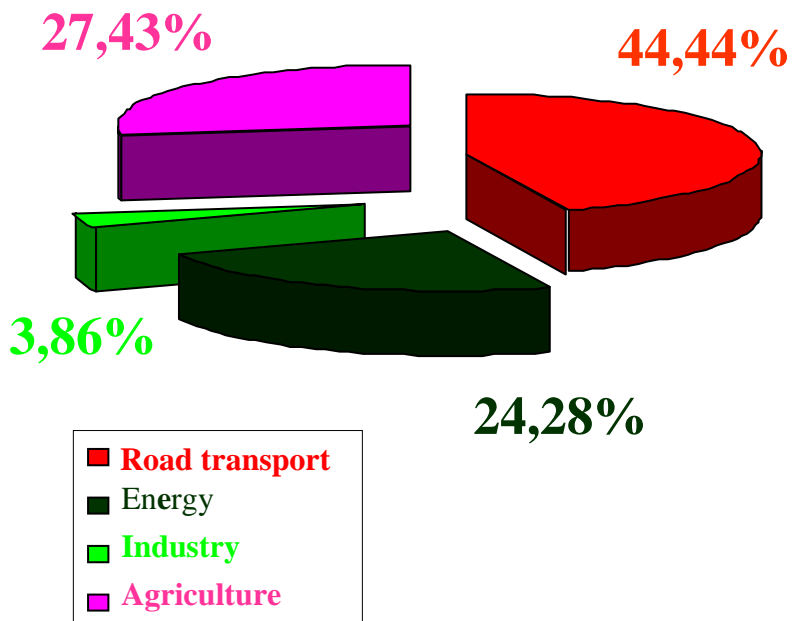
Data on the consumption of fuel in Georgia from 2000 to 2006 (tones)



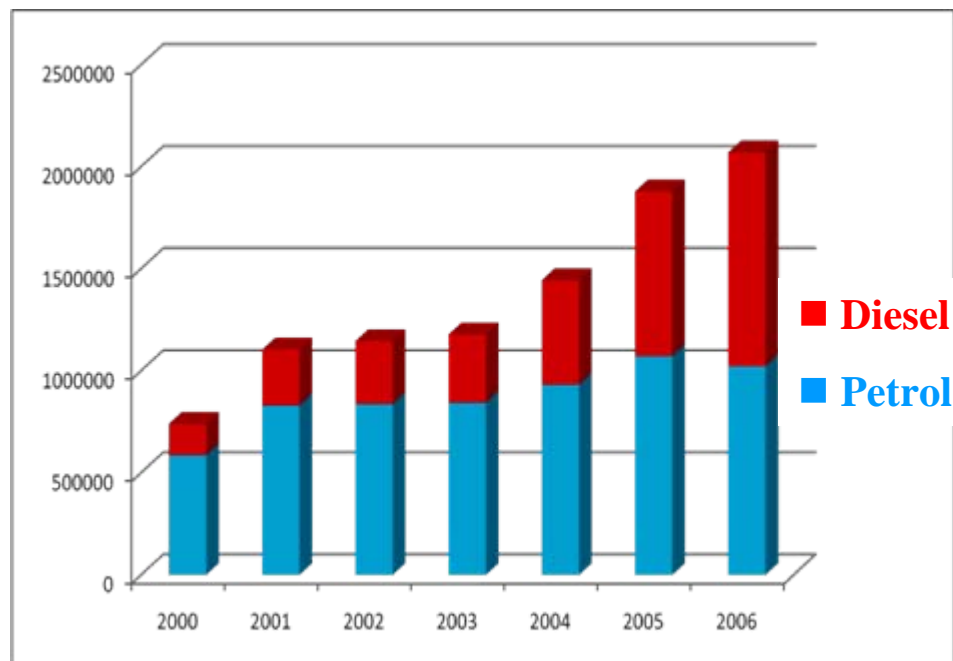
Source: Department of Statistics of Georgia

Consequences of existing policy: Health and Environmental aspects (1)

Sources of atmospheric air pollution in 2005



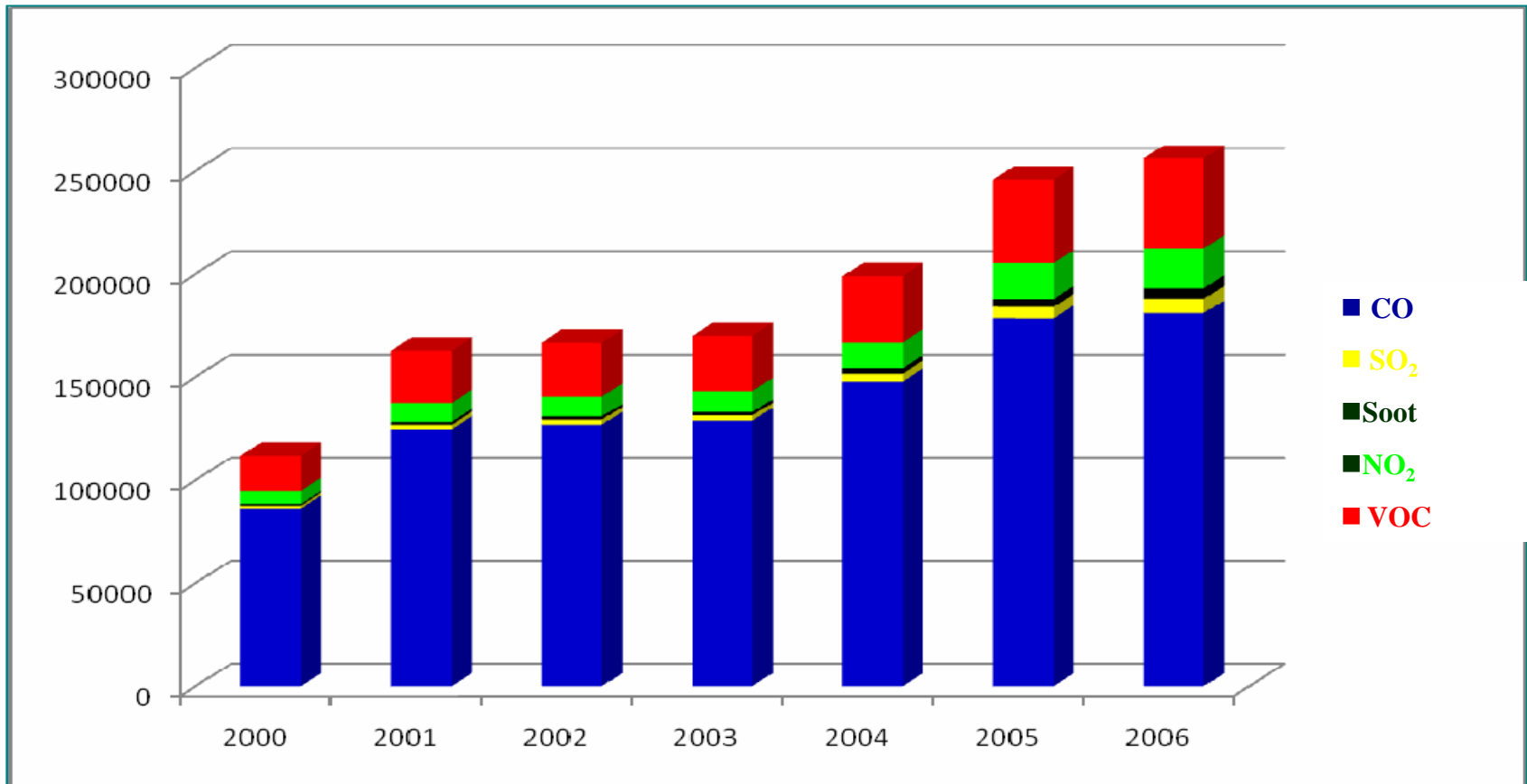
Dynamics of CO₂ emissions from transport sector



Source: Air Protection Division of the Ministry of Environment of Georgia

Consequences of existing policy: Health and Environmental aspects (2)

Emissions of CO, SO₂, Soot, and VOC from transport sector



Source: Air Protection Division of the Ministry of Environment of Georgia



Consequences of existing policy: Health and Environmental aspects (3)

- ❑ Poor fuel quality**
- ❑ Lack of modern fuel-testing laboratories**
- ❑ Health issues: Cancer and Respiratory illnesses**
- ❑ Excessive noise**
- ❑ Lack of monitoring and measurements on major pollutants (NO₂, SO₂, VOC)**
- ❑ No measurements on PM₁₀ and PM_{2,5}**
- ❑ No studies on health effects**

Ongoing reforms

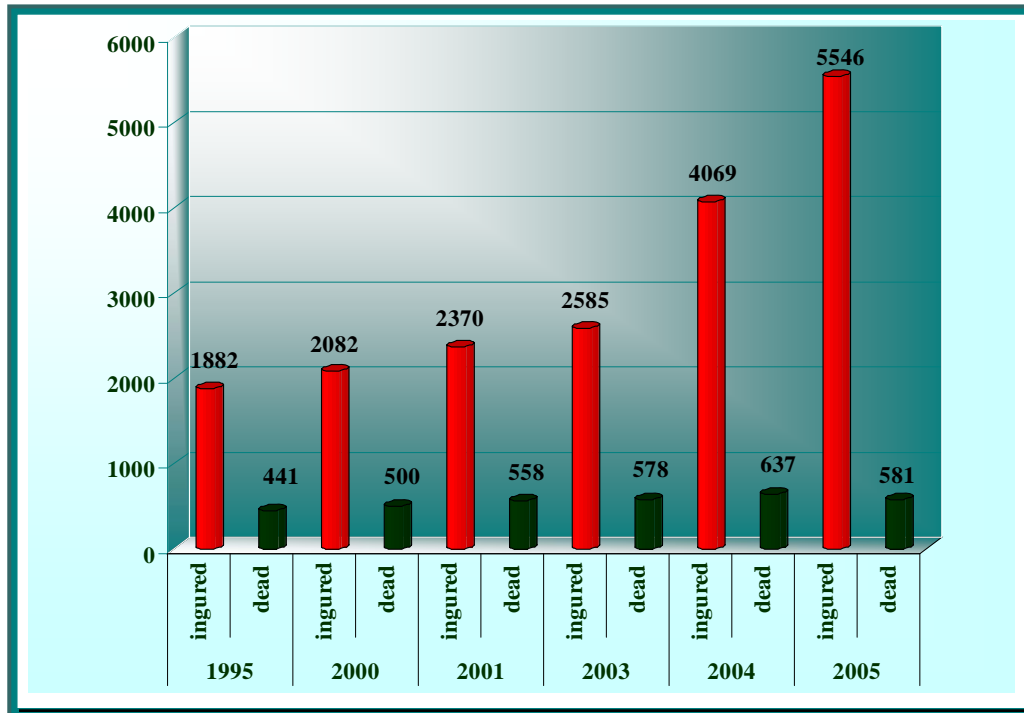
Previous



Positive transformations (1)



- ❑ The adjustments to “The Georgian Law on Traffic Safety” restricted the use of mobile phones by drivers;
- ❑ The use of safety belts became mandatory;
- ❑ Penalties for violations of road safety rules (high speed, drunkenness, etc.) have considerably increased.



Sources : Transport and Communication in Georgia, Statistical Yearbook, Statistic Department of Georgia

Positive transformations (2)



Rehabilitation of
infrastructure and

ing equipment
ation (52 units)



Introduction of



Rehabilitation of some green areas

Tbilisi.gov.ge

Positive transformations (3)



- ❑ Preparation of GEF project on Promotion of Sustainable Transport in the City of Tbilisi was terminated; BUT
- ❑ UNEP DTIE and three countries from CEE (Armenia, Georgia and Moldova) can start developing a new project proposal;
- ❑ There would be 4 general components:
 1. High-quality public transport
 2. Non-motorised transport (NMT)
 3. Transportation Demand Management
 4. Awareness raising and outreach activities (for behavioural change)
- ❑ EU funding or ?

Recommendations and way forward (1)



- ❑ MOU on intersectoral cooperation;
- ❑ Preparation of a transport management plan;
- ❑ Ban sulfur (high sulfur) and leaded gasoline and monitor of a ban on leaded gasoline and
- ❑ Improvement of transport monitoring system;
- ❑ Improvement of infrastructure and services;
- ❑ **Special taxes on 1**
- ❑ Increasing the number of environmentally friendly transport modes such as trolley and tram (the study should be done);
- ❑ Provide opportunities for the public to participate in the planning and decision-making processes of transport policy.



Recommendations and way forward (2)



Transport Demand Management:

Goal: Decrease the demand for private transport

Improvement to public transport

✓ The rehabilitation of roads

✓ The integrated ticketing

✓ Convenient, safe, and reliable

Market and pricing

✓ Special fees (London case);

✓ Removing parking subsidies (20 cents per hour!!!)

✓ Special Road pricing (not considered yet)



transport and demand

not (done);

under consideration);

transport

Recommendations and way forward (3)



❑ Parking and land-use management

- ✓ Special walking zones
- ✓ Bicycles paths can be created in many areas, especially in the city center
- ✓ Condition of pedestrian crossings should be urgently improved, particularly in the city center
- ✓ A clear designation of bus lanes for buses whose drivers are not allowed to park (at any time);
- ✓ The installation of parking ticket dispensers;
- ✓ Underground parking facilities.



in the city center; (Ministry of Transport and Road Safety of Georgia, 2014);

are not practically needed);

city's streets to be widened;

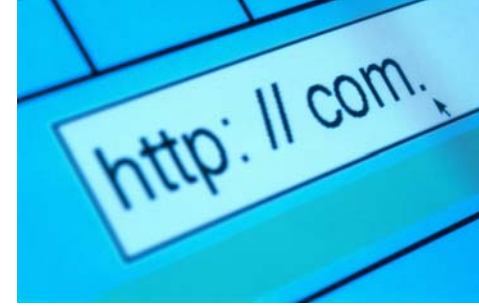
wntown;

o be helpful. (Ministry of Transport and Road Safety of Georgia, 2014);

nywhere and at any time);



Useful links:



- ❑ **Transport, Health and Environment - Pan European Programme (THE PEP):** <http://www.thepep.org/en/welcome.htm>
- ❑ **US EPA transport and air quality:** <http://epa.gov/otaq/>
- ❑ **WHO transport:**
http://www.euro.who.int/transport/modes/20021009_1
- ❑ **Centre for sustainable transportation:** <http://cst.uwinnipeg.ca/>
- ❑ **UNEP Urban Environment Unit:**
http://www.unep.org/urban_environment/
- ❑ **EU transport:** http://ec.europa.eu/transport/index_en.html
- ❑ **European Federation for Transport and Environment:**
<http://www.transportenvironment.org/>
- ❑ **JICA transportation:**
<http://www.jica.go.jp/english/global/tran/initiatives.html>



**Thank you very much for Your
attention!**

Questions?



If you can't measure it, you can't control it...

If you can't control it, you can't manage it...

If you can't manage it, you can't improve it.

***From EU project "Strategies for public transport in cities"**