



# Sustainable and Healthy Urban Transport Policies

Skopje, 7 - 8 June 2010

“Working together to make things happen”

## *Presentation of the results of the Survey on Urban Transport in Skopje*



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[www.iph.mk](http://www.iph.mk)



# *Independence : 8 September 1991*



# Introduction

- Republic of Macedonia is located in central part of the Balkan's Peninsula with 25.713  $\text{km}^2$ .
- 2,045,177 inhabitants, 1,025,239 male and 1,019,938 female.
- Average population density in the Republic of Macedonia is 78.8  $\text{km}^2$ .
- Population's density in urban areas is higher than in rural areas, and most populated city is Skopje with 317.8 inhabitants on 1  $\text{km}^2$ , Tetovo - 176.9 and Struga - 121.9 1 inhabitants on 1  $\text{km}^2$   $\text{km}^2$ .
- From total population in the Republic of Macedonia in cities live 1,217,550 inhabitants, and in villages 822,678 inhabitants, or 59.7% in cities and 40.3% in villages.

# **Institute of Public Health**

## **Vision**

- Healthy people in a healthy and safe environment with organized and sustainable health system.

## **Mission**

- Applying health promotion, healthy life style and life quality, early detection of health risk factors through risk assessment and risk management, organisation of health care and evidence-based policy interventions.

**Established in 1924**

# Institute of Public Health

Applying the guiding principles of public health approach, ecological model, promotion, prevention, education, investigation, economic evaluation, multidisciplinary approach and intersectoral collaboration, IHP realises the following public health activities with high quality:

- Monitoring, evaluation and analysis of health status;
- Public health surveillance, research, and control of risks to public health;
- Evaluation and promotion of equitable access to necessary health services;
- Development of policies and institutional capacity for planning and management in public health;

# Institute of Public Health

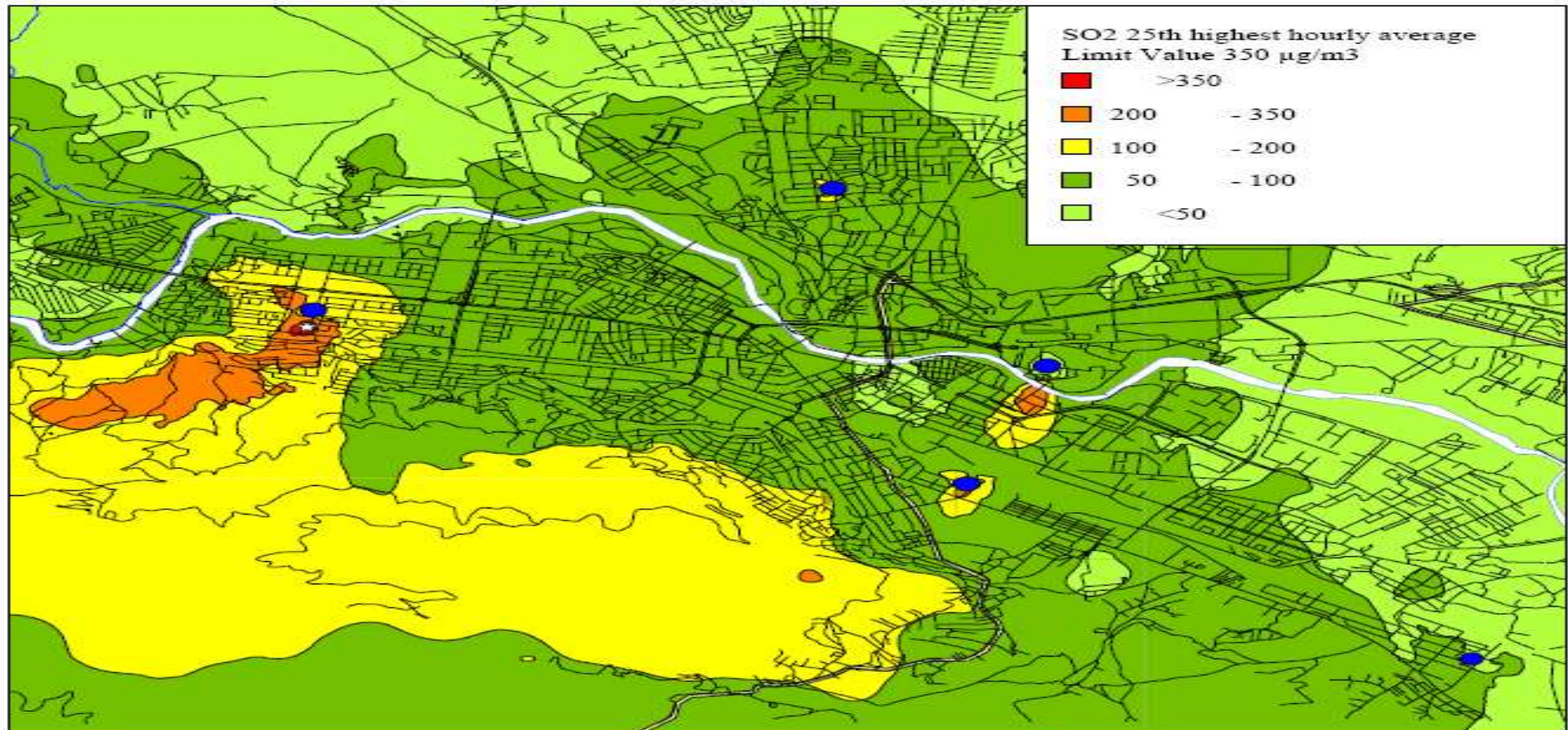
- Collaboration with the Ministry of Health, WHO, UNECE, UNICEF, UNDP;
- Strengthening of institutional capacity for regulation and enforcement in public health – harmonisation of the existing standards and norms with the EU standards;
- Research in public health and investigations for lifestyles;
- Broad preventive activities for detection of health risks, especially in vulnerable populations (children, school children, women, elderly, Roma);
- Health promotion and social participation in health;
- Ensuring the quality of personal and population-based health services – consultative services, expertise and indications;
- Human Resource development and training in public health;
- Reducing the impact of emergencies and disasters on health;
- THE PEP;
- Protocol on Water and Health.

# Institute of Public Health

- **Scope of work - Survey**
- **Institute of Public Health** was responsible for preparation, organization, carrying out and reporting of results of the Survey based on pre-determined questionnaire. The questionnaire was amended with four questions relating health awareness issues.
- Preparation for, carrying out and presentation of the results of the Survey on urban transport in Skopje. Survey was carried by 20 surveyors which interviewed 205 citizens of different age, gender, profession and place of residence in Skopje.

# SKOPJE

## ENERGY PRODUCTION



☆ = maximum = 482 ( $\mu\text{g}/\text{m}^3$ )  
● = emission source



25th highest hourly average SO<sub>2</sub> concentration [ $\mu\text{g}/\text{m}^3$ ]

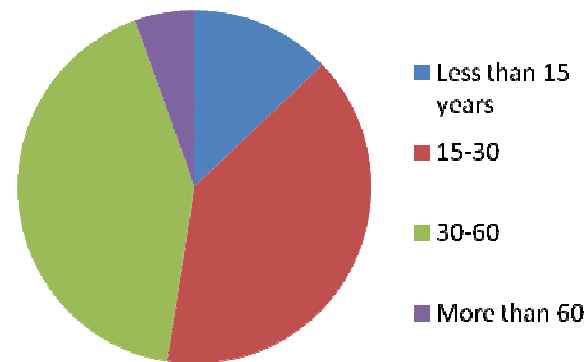


# Survey for Urban Transport in Skopje

- 205 participants to the survey living in the city of Skopje
- 61.88% females, 38.12% males

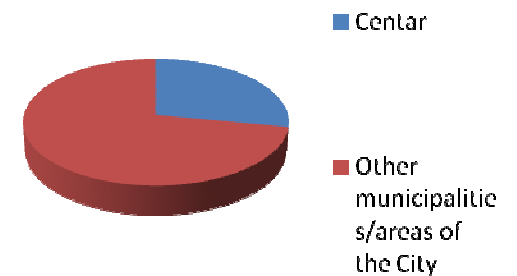
- **Age groups:**

- less than 15 years: 12.87%
- 15 – 30: 39.63%
- 30 – 60: 42.13%
- more than 60: 5.45%



- **Distribution in the city:**

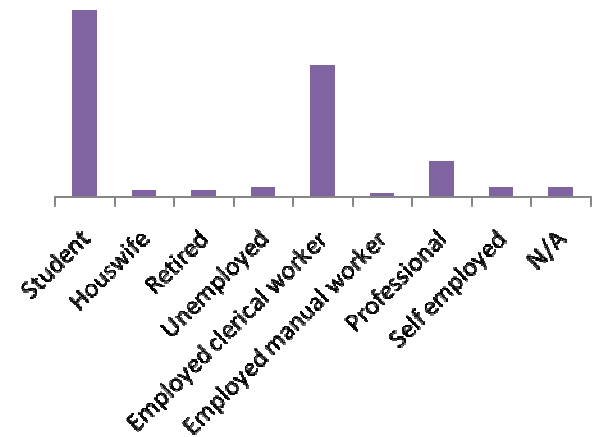
- 28% living in the Municipality of Centar
- 72% living in other municipalities/areas of the City



# Survey for Urban Transport in Skopje

- **Profession distribution**

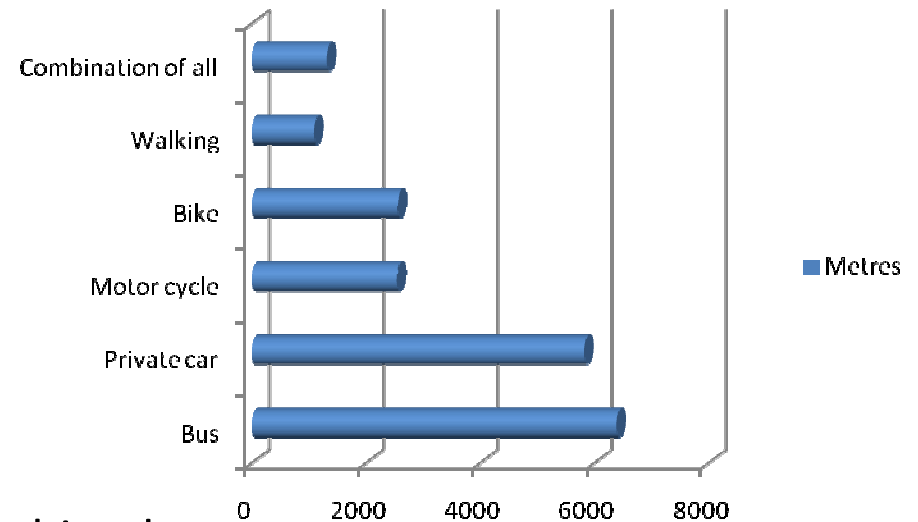
- Student: 46.53%
- Housewife: 1.49%
- Retired: 1.98%
- Unemployed: 2.48%
- Employed clerical worker: 32.67%
- Employed manual worker: 0.99%
- Professional: 8.91%
- Self employed: 2.48%
- N/A: 2.48%



# Survey for Urban Transport in Skopje

- **Modes of transport used to commute for work/school and distance length**

- Bus (public transport): 6378m
- Private car: 5810m
- Motor cycle: 2530m
- Bike: 2540m
- Walk: 1078m
- Combination of above: 1300m\*



\* Not indicating which vehicles are combined

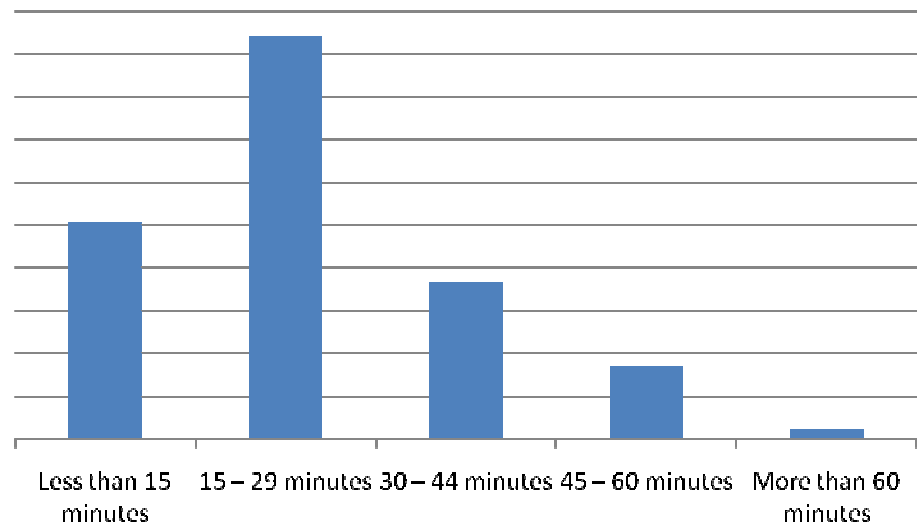
# Survey for Urban Transport in Skopje

- **Days a week going for work/school**

- 5: 84.65%
- 6: 7.43%

- **Door-to-door, duration of single journey between home and work/school on an average day**

- Less than 15 minutes: 25.25%
- 15 – 29 minutes: 47.03%
- 30 – 44 minutes: 18.32%
- 45 – 60 minutes: 8.42%
- More than 60 minutes: 1%



# **Survey for Urban Transport in Skopje**

- **Respondents ranking the first three reasons for choice of the mode of transport**

1. Cost

2. Duration

3. Safety

# Survey for Urban Transport in Skopje

- **The most frequent use of transport for other local travel (shopping, social activities, etc.)**
  1. Walking
  2. Private car
  3. Bus
  4. Bike
  5. Motor cycle
  6. Mini bus
  
- **The most frequent use of transport for leisure**
  1. Walking
  2. Private car
  3. Bus
  4. Bike
  5. Motor cycle
  6. Mini bus

# Survey for Urban Transport in Skopje

- **Vast majority of the participants typically make 1-2 trips per day apart from work/school**
- **Ranking of the reason(s) for typical choices of the mode of transport for work/school trips:**
  1. Duration
  2. Cost
  3. Health
  4. Comfort/Convenience
  5. Safety
  6. Environmental reasons

# Survey for Urban Transport in Skopje

- **Participants ranking the reason(s) for typical choices of the mode of transport for non-work/school trips:**
  1. Cost
  2. Duration
  2. Comfort/Convenience
  4. Health
  5. Safety
  6. Environmental reasons



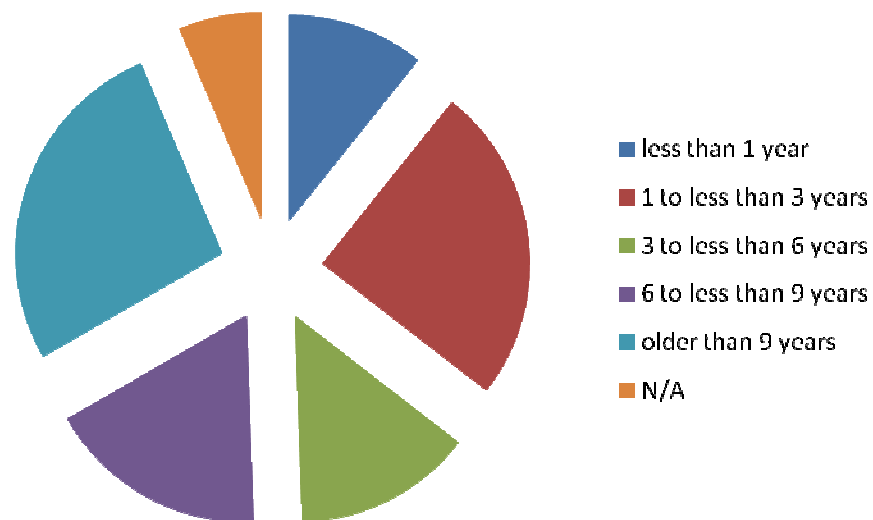
# Survey for Urban Transport in Skopje

- **Car ownership**

- Yes: 93
- No: 103

- **If yes, how old is the car**

- less than 1 year: 10
- 1 to less than 3 years: 23
- 3 to less than 6 years: 13
- 6 to less than 9 years: 16
- older than 9 years: 25
- N/A: 6



# Survey for Urban Transport in Skopje

- **Ranking the purpose for using the car:**
  1. Commuting to work
  2. Leisure
  3. Shopping
  4. To work with
- **Ranking the required improvement on public transport (i.e. frequent bus services, cheap bus fares, etc.) to cause participants to switch from car:**
  1. Better service (closer availability to your house and/or work)
  2. More comfortable service
  3. More frequent service
  4. Doesn't matter, would not switch from driving
  5. Lower cost

# Survey for Urban Transport in Skopje

- If bicycling facilities were improved (e.g. through provision of an extensive network of bicycle lanes), would the participants ride a bicycle to work and/or other activities (or, if they already do bike sometimes, would they bike more often)?

## Ranking the frequency:

1. In summer only
2. Every day
3. Between 2- 3 times per week
4. Between 4- 5 times per week
5. All year round

# Survey for Urban Transport in Skopje

- **Ranking the measures that the government/municipal authority should do to improve the situation with the urban transport?**
  1. Improve bus system (more, nicer buses, more frequent, faster service, etc.)
  2. Better bicycle/pedestrian facilities
  3. Develop an underground metro
  4. Better traffic management
  5. Develop a surface rail (tram) system

# Survey for Urban Transport in Skopje

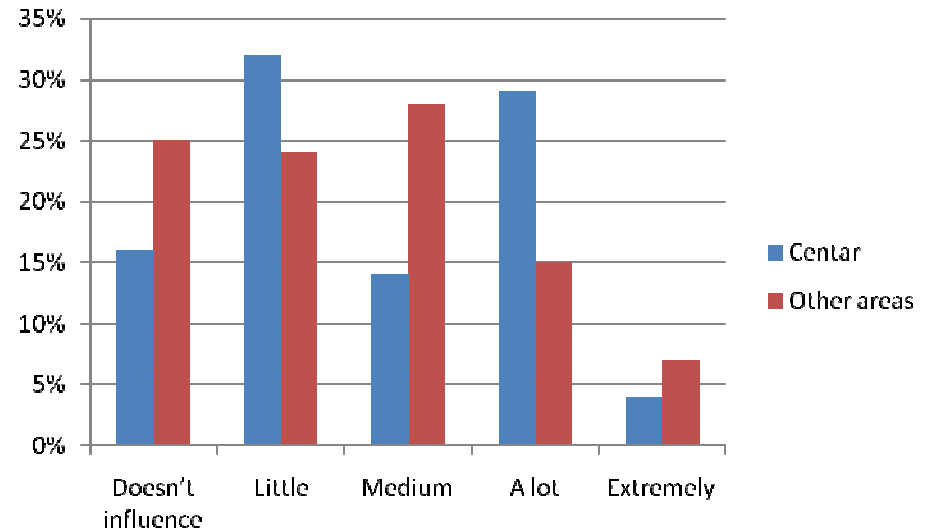
- Participants ranking the ways to pay for the improvements suggested
  1. General tax revenues
  2. Other revenues
  3. Increased fuel/vehicle taxes
  4. Increased toll systems

# Survey for Urban Transport in Skopje

- Problems related to transport in Skopje (participants thoughts):
  - ***“Irregular lines, crowds, old busses”***
  - ***“Total chaos”***
  - ***“People should more walk and ride bikes”***
  - ***“If we walk more we’ll keep air clean”***
  - ***“To reconstruct the streets, put more signs”***
  - ***“More parking places and bike tracks”***
  - ***“Bad services, not adapted to consumers”***
  - ...

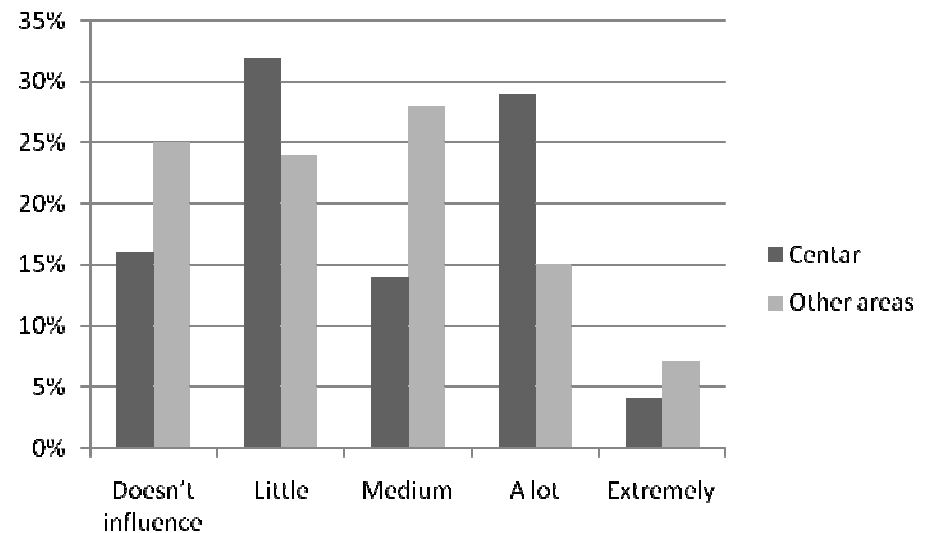
# Survey for Urban Transport in Skopje

- **96% of the people living in the Municipality of Centar stated that the traffic influences the quality of the ambient air in Skopje**
- Ranking of the participants living in **Centar / Other** areas concerning the influence of the air pollution to their health
  - Doesn't influence: 4% / 3%
  - Little: 11% / 10%
  - Medium: 32% / 27%
  - A lot: 39% / 47%
  - Extremely: 11% / 13%



# Survey for Urban Transport in Skopje

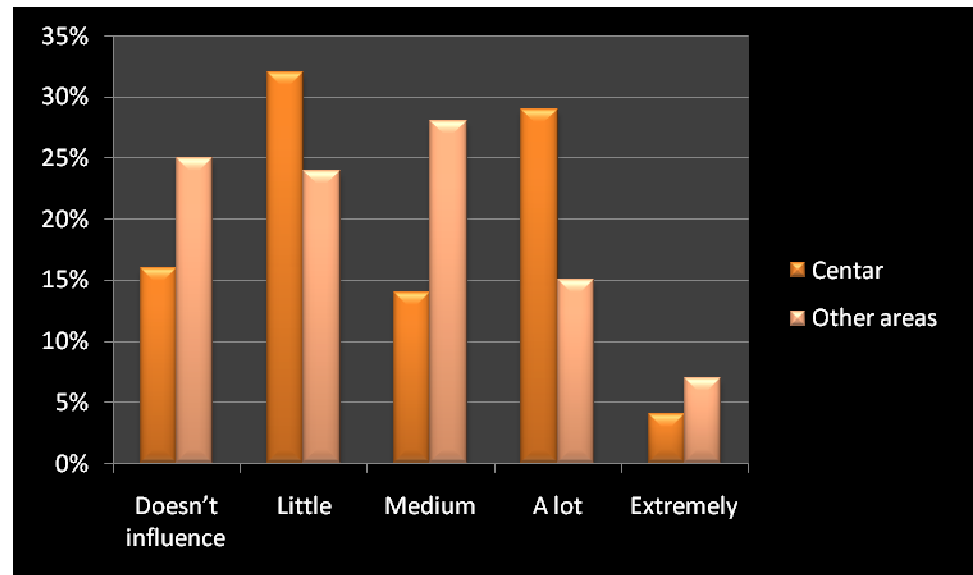
- **Ranking of the participants concerning disturbances in sleeping in last 12 months and before related to the urban transport (Centar/Other areas)**
  - Doesn't influence: 29% / 25%
  - Little: 25% / 27%
  - Medium: 16% / 28%
  - A lot: 20% / 15%
  - Extremely: 7% / 5%





# Survey for Urban Transport in Skopje

- Ranking of the participants concerning influence of noise from transport in conducting everyday activities at home in last 12 months and before (Centar/Other areas)
  - Doesn't influence: 16% / 25%
  - Little: 32% / 24%
  - Medium: 14% / 28%
  - A lot: 29% / 15%
  - Extremely: 4% / 7%



Thank you