

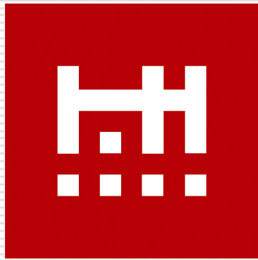
CITY OF BRATISLAVA

METHODOLOGY
OF TRAFFIC IMPACT ASSESSMENT IN THE
CITY OF BRATISLAVA

by:

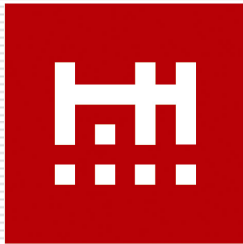
ING. VLADIMÍR MIKUŠ

head of department of
transportation planning and traffic
control



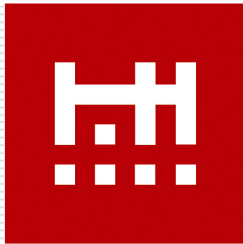
CONTENTS

- why methodology
- objectives and principles
- number of trips generation
- assignment to the network
- capacity calculations
- examples, case studies



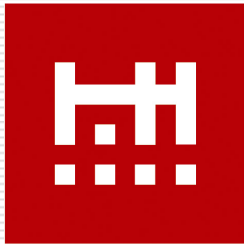
3 MAIN ARGUMENTS FOR METHODOLOGY EXISTENCE

- ❑ tail of the transportation infrastructure away to the city urban development
- ❑ efforts to achieve sustainable development
- ❑ acquirement of the traffic regulation tool in frame of risk management

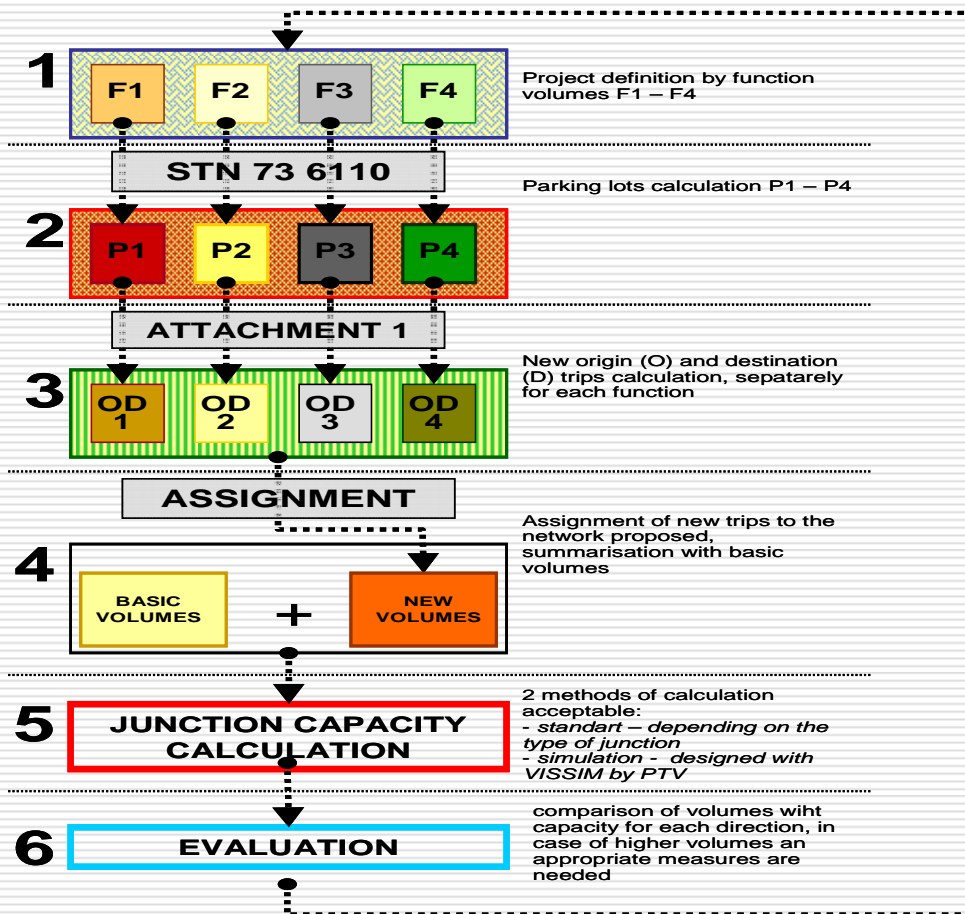


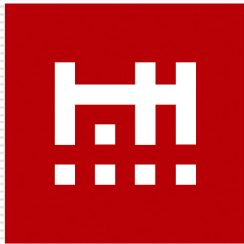
THE BASIC PHILOSOPHY

- ❑ correlation between static and dynamic volumes (a day turnover on parking lots proposed)
- ❑ crossroads - the subject of the impact assessment
- ❑ using the principles of mathematic modelling
- ❑ all the calculations are relevant to peak-hour period



PROGRESS PATTERN

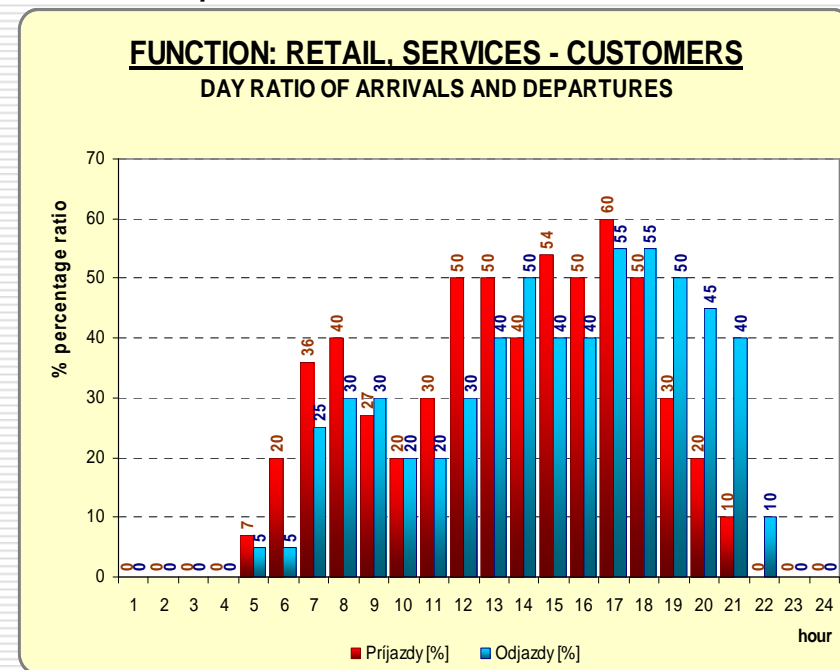


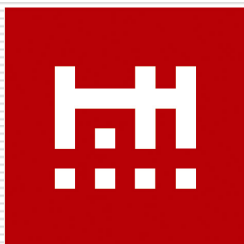


TRIPS GENERATION - RESOURCES

- each function has a specific day course of incoming and out coming trips
- existing database of day courses for each function
- percentage ratio of the relevant parking lot capacity in a turnover

Example:

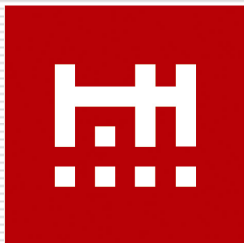




TRIPS GENERATION – SAMPLE

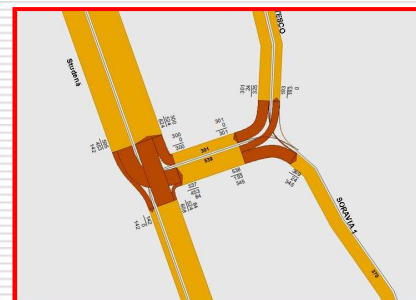
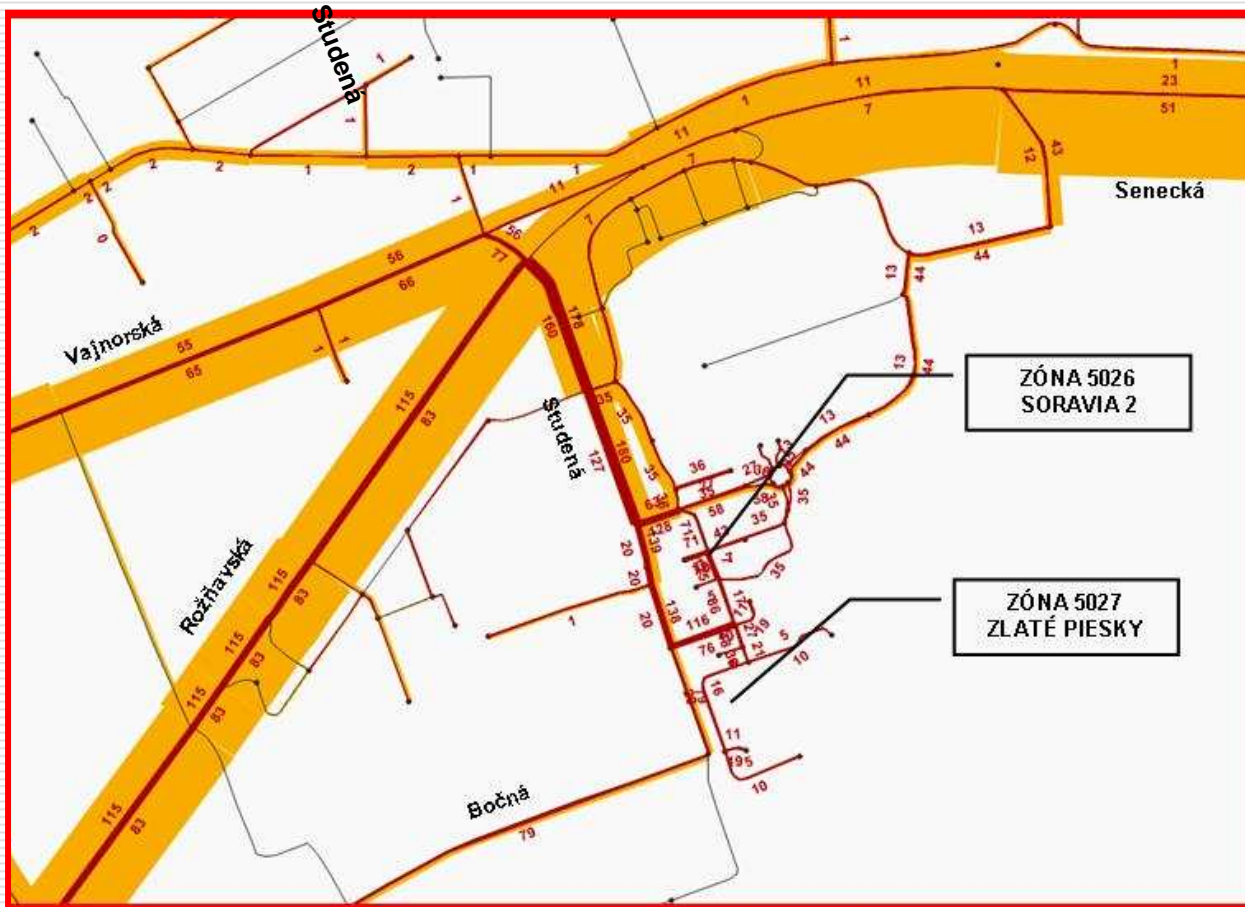
Function	parking lots (STN)	number of trips in morning peak hour 7:00 - 8:00				
		origin		destination		total
		%	veh/hour	%	veh/hour	
residential	1 000	35,0	350	8,0	80	430
administration employees	250	0,0	0	40,0	100	100
administration customers	200	8,5	17	35,0	70	87
retail, services employees	400	30,0	120	0,0	0	120
retail, services customers	800	30,0	240	40,0	320	560
accomodation, food	150	10,0	15	20,0	30	45
culture, sport	300	0,0	0	10,0	30	30
total	3 100		742		630	1 372

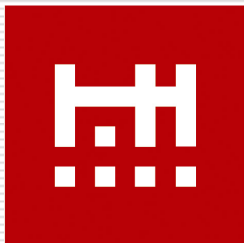
Funkcia	parking lots (STN)	number of trips in morning peak hour 7:00 - 8:00				
		origin		destination		total
		%	veh/hour	%	veh/hour	
residential	1 000	10,0	100	30,0	300	400
administration employees	250	40,0	100	6,0	15	115
administration customers	200	22,0	44	8,0	16	60
retail, services employees	400	10,0	40	10,0	40	80
retail, services customers	800	55,0	440	54,0	432	872
accomodation, food	150	15,0	23	30,0	45	68
culture, sport	300	15,0	45	62,0	186	231
total	3 100		792		1 034	1 826



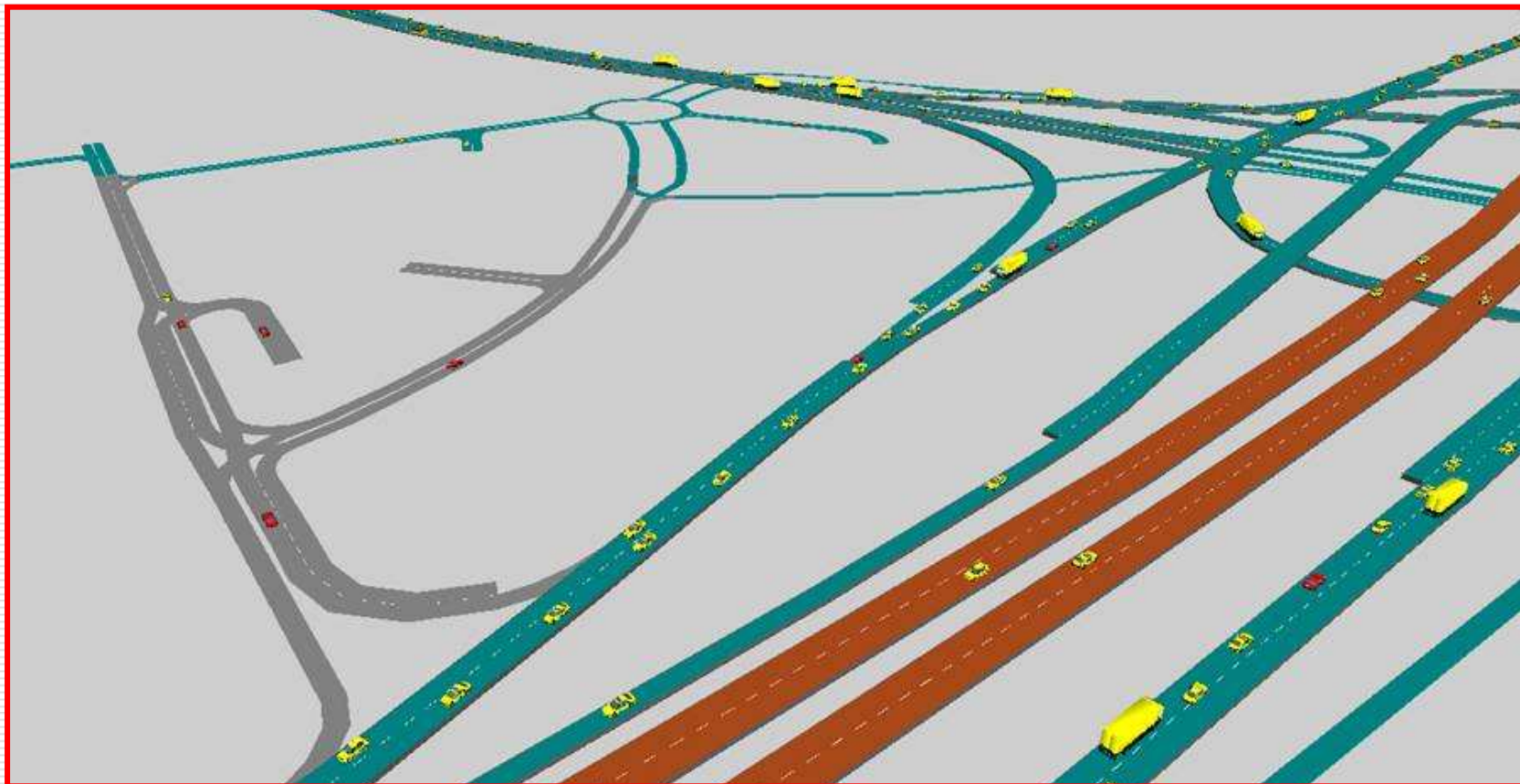
ASSIGNMENT TO THE NETWORK – SAMPLE

TESCO

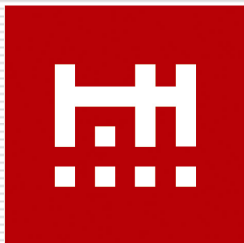




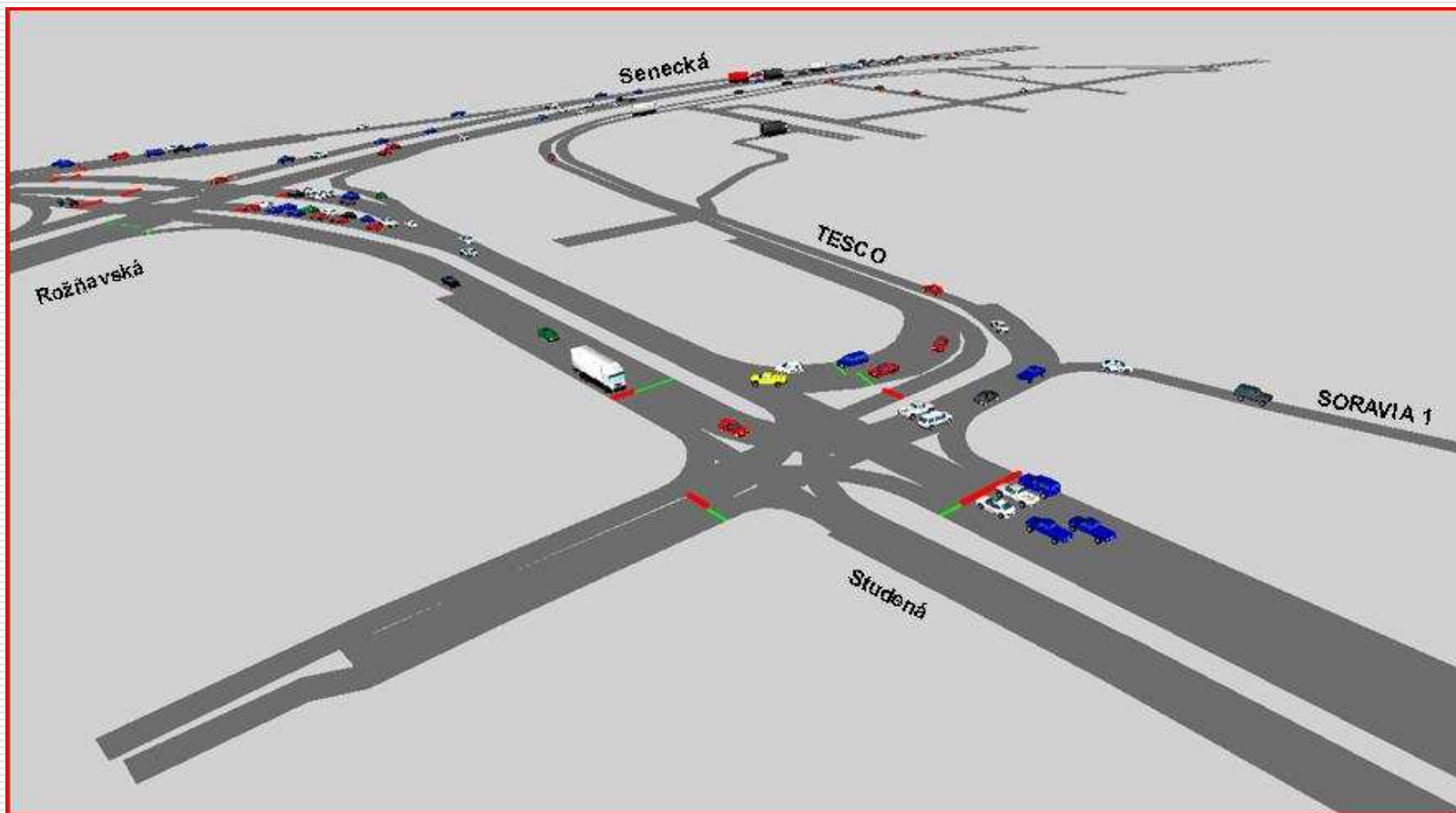
SIMULATION MODEL - SAMPLE



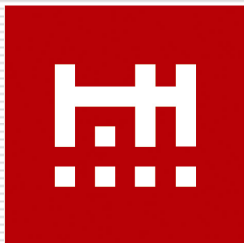
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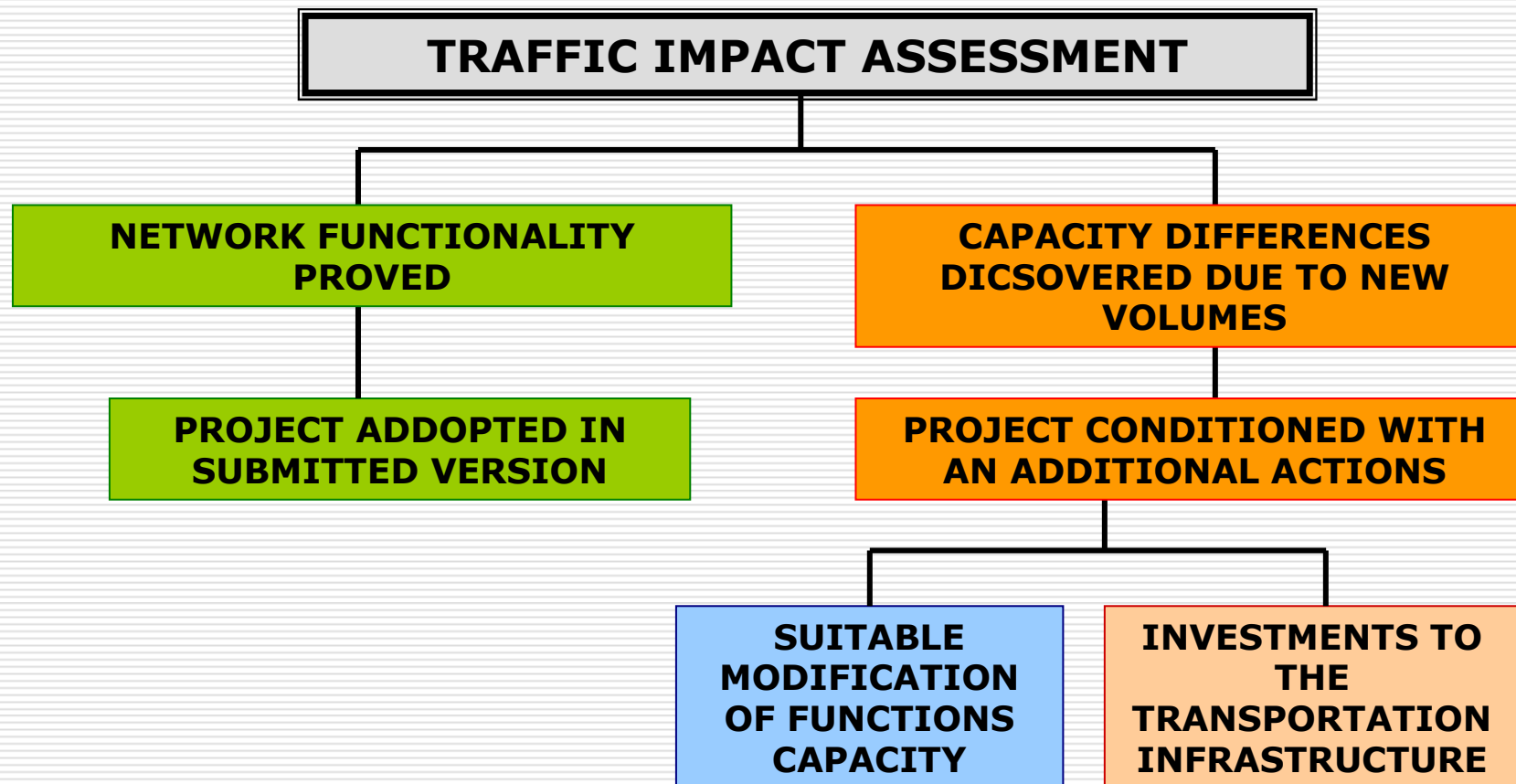
SIMULATION MODEL - SAMPLE

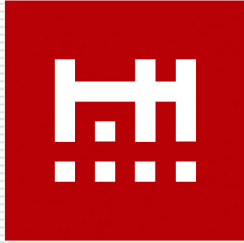


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EVALUATION





THANK YOU FOR YOUR ATTENTION

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