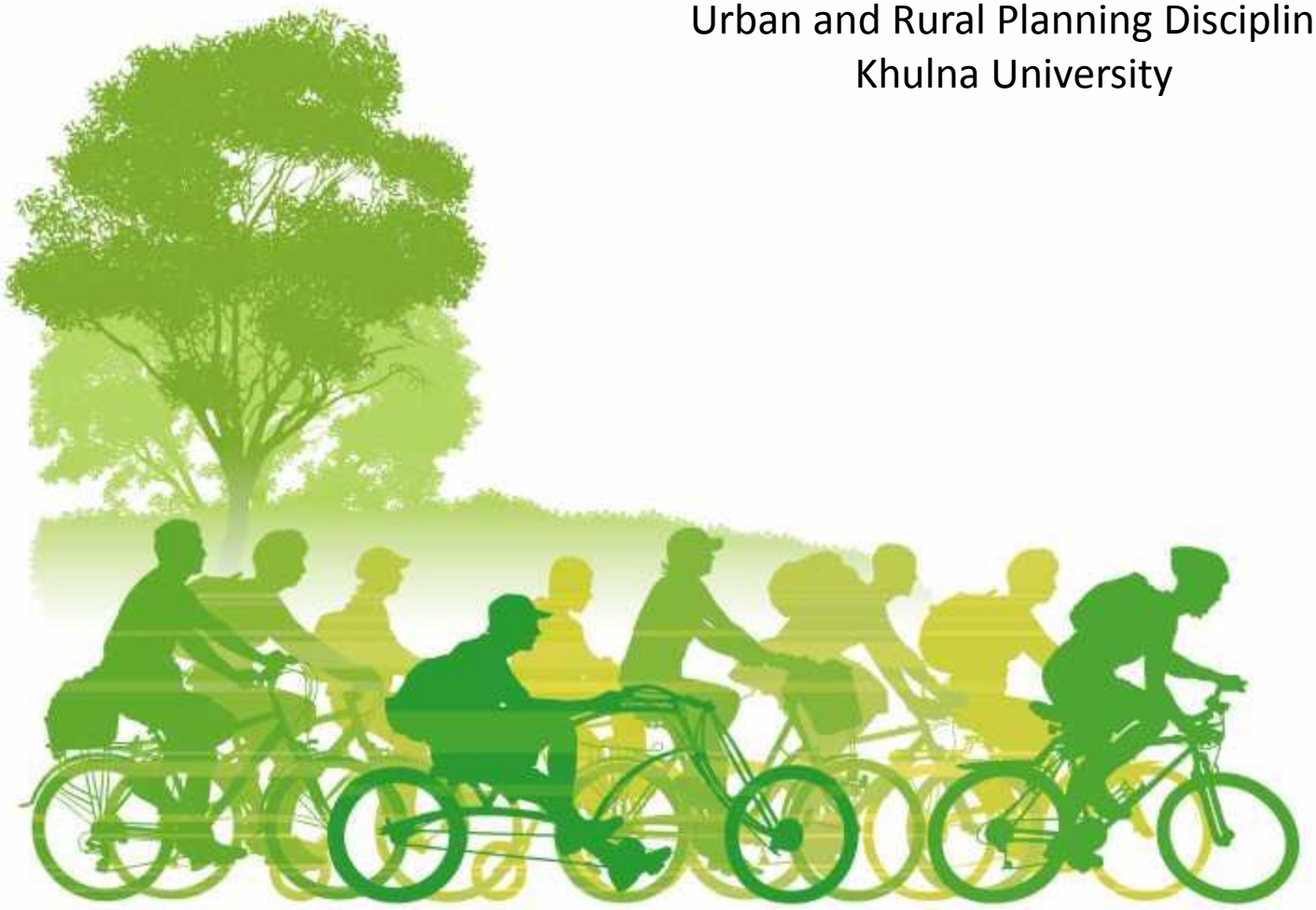
Sustainable Transportation for Mymensingh

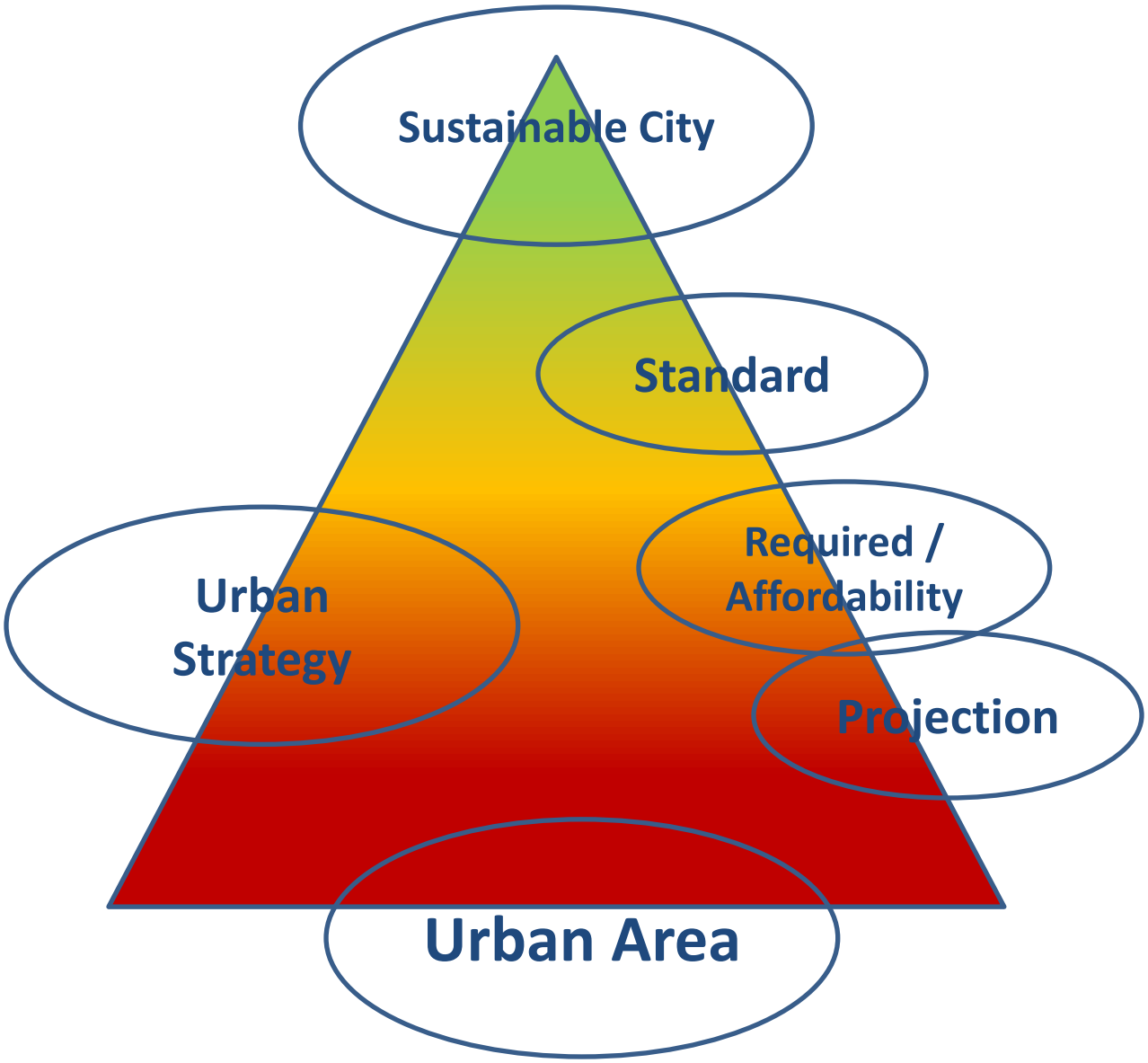
Ahsanul Kabir, *PhD*
Urban and Rural Planning Discipline
Khulna University



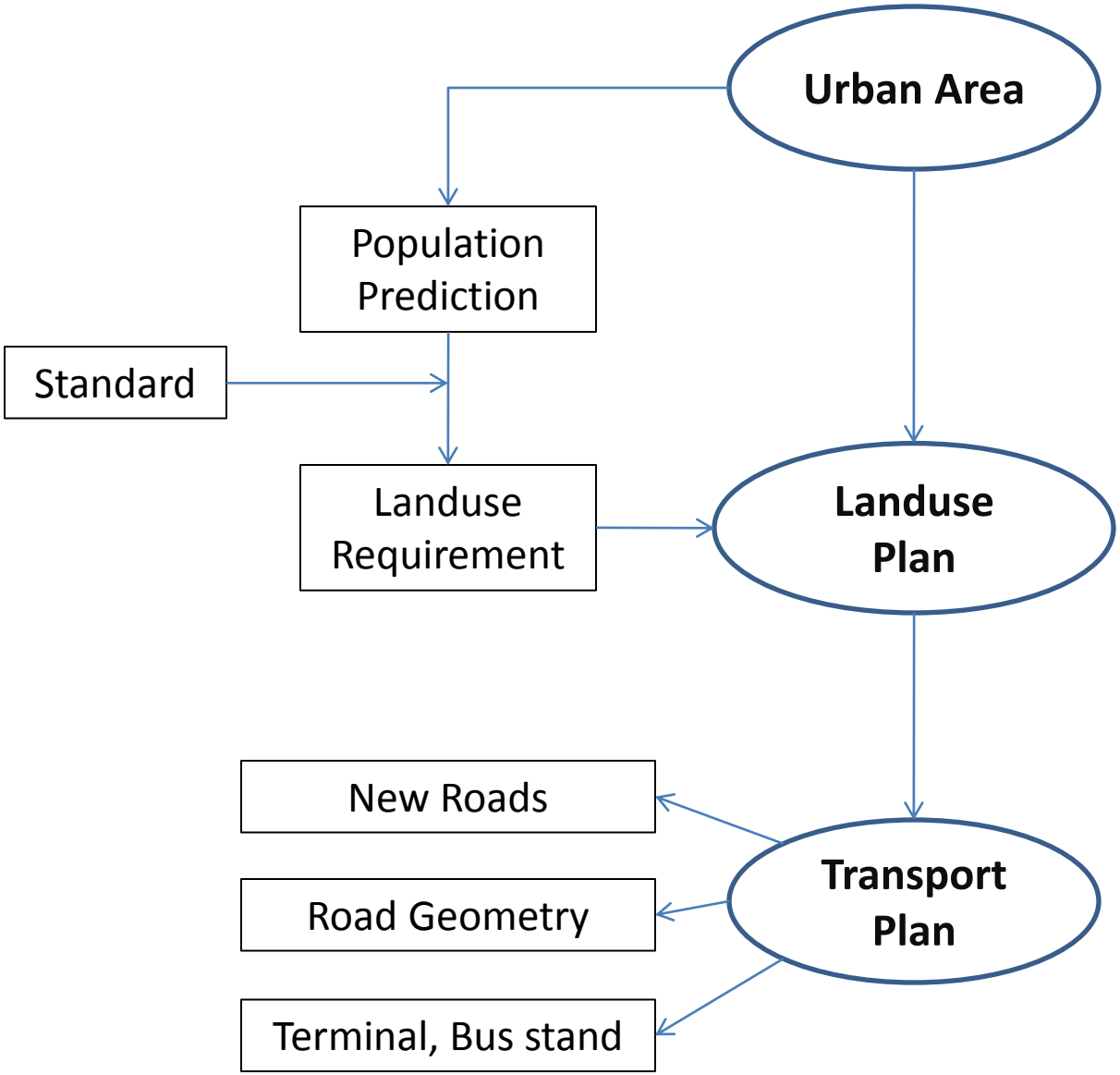
Sustainable Transportation

Objectives

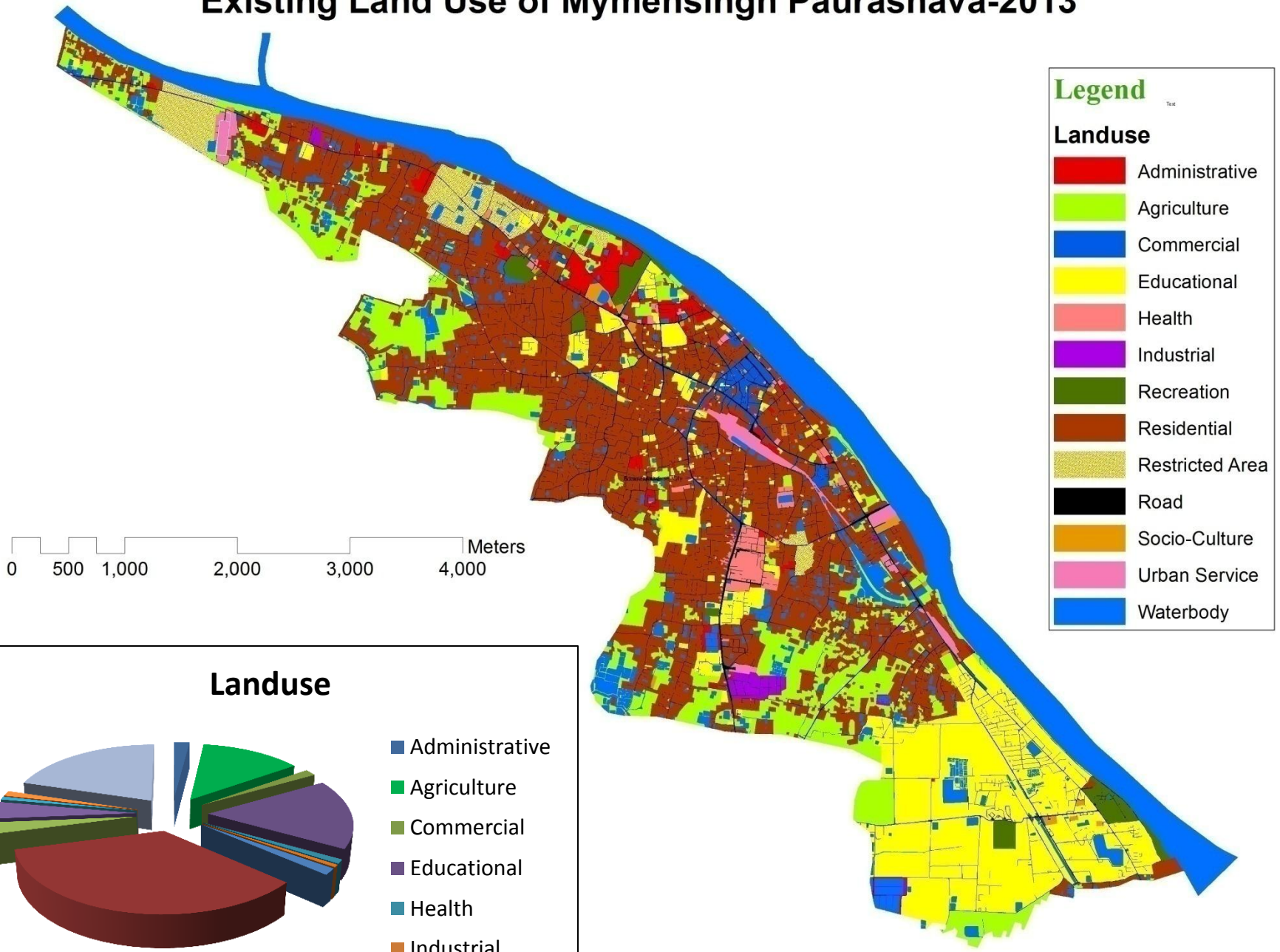
- to develop a sustainable development plan for the study area ensuring to accommodate future growth in a sustainable manner.
- to aid the MSDP projects in its transport component in making/ designing a city.

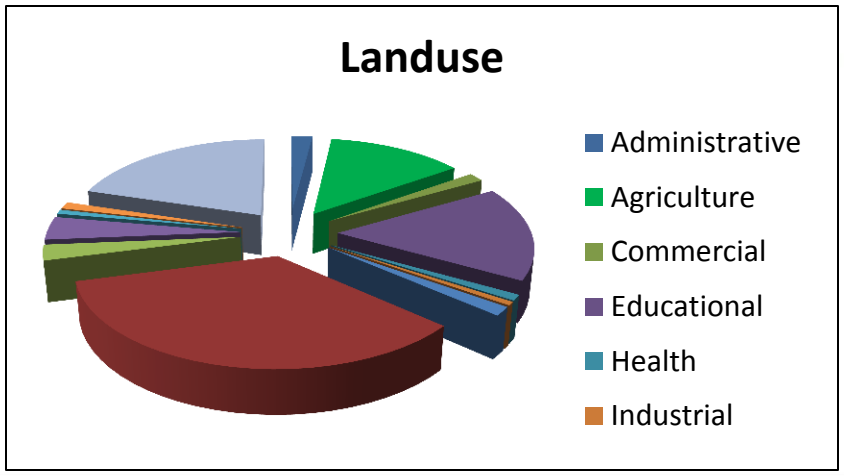

Sustainable City
Standard
Urban
Strategy
Required /
Affordability
Projection
Urban Area

Transport in Municipal Planning

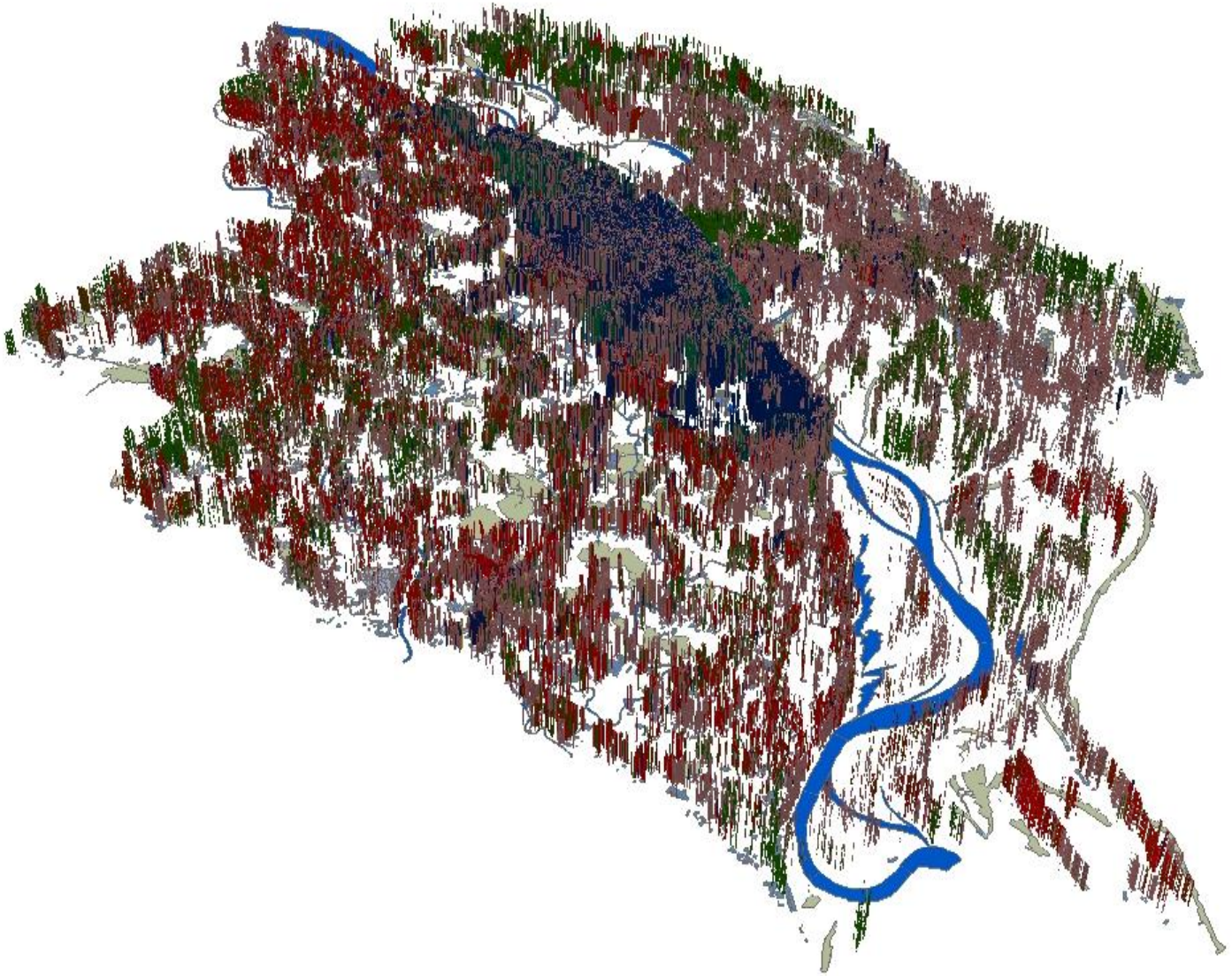


Existing Land Use of Mymensingh Paurashava-2013

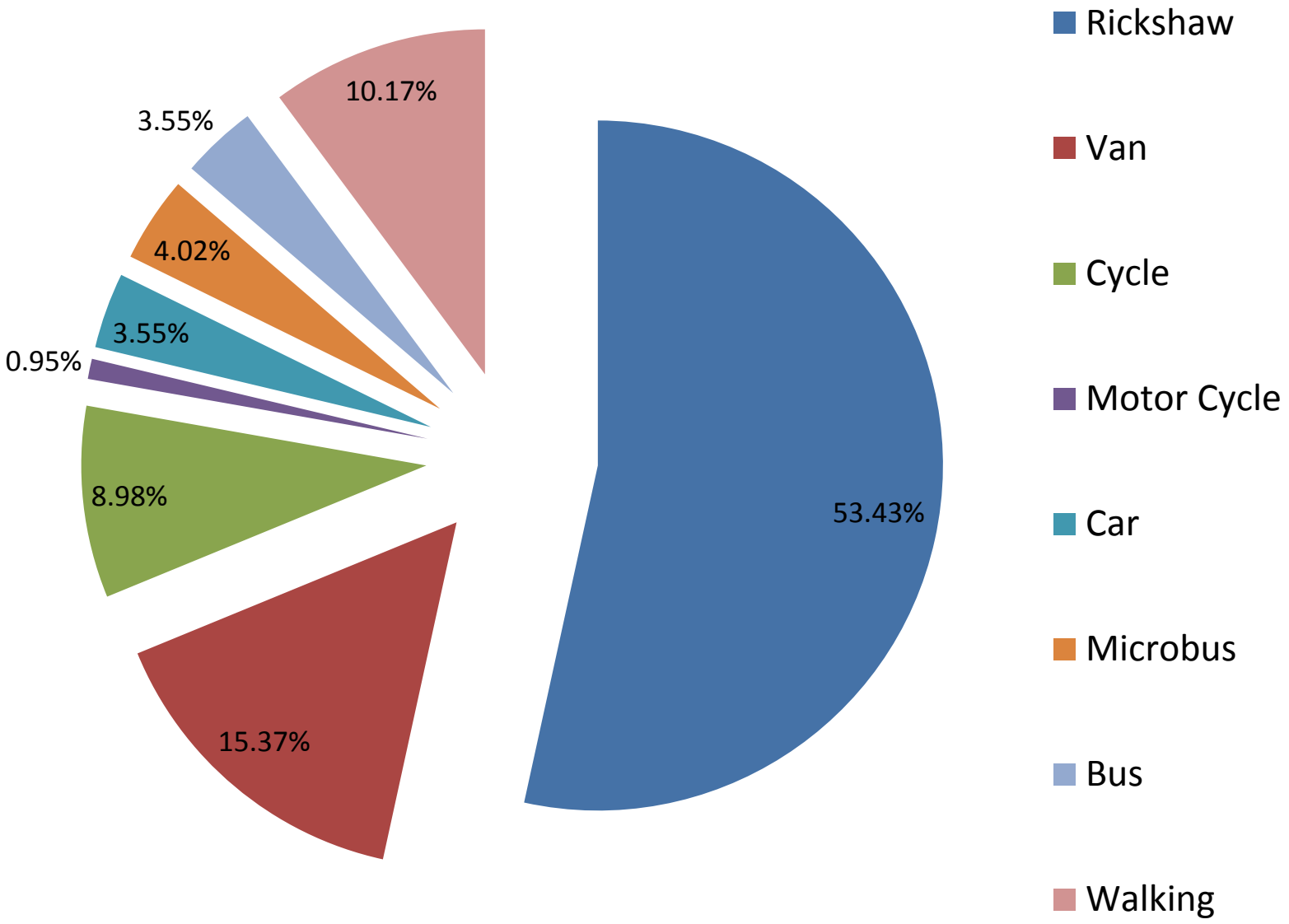




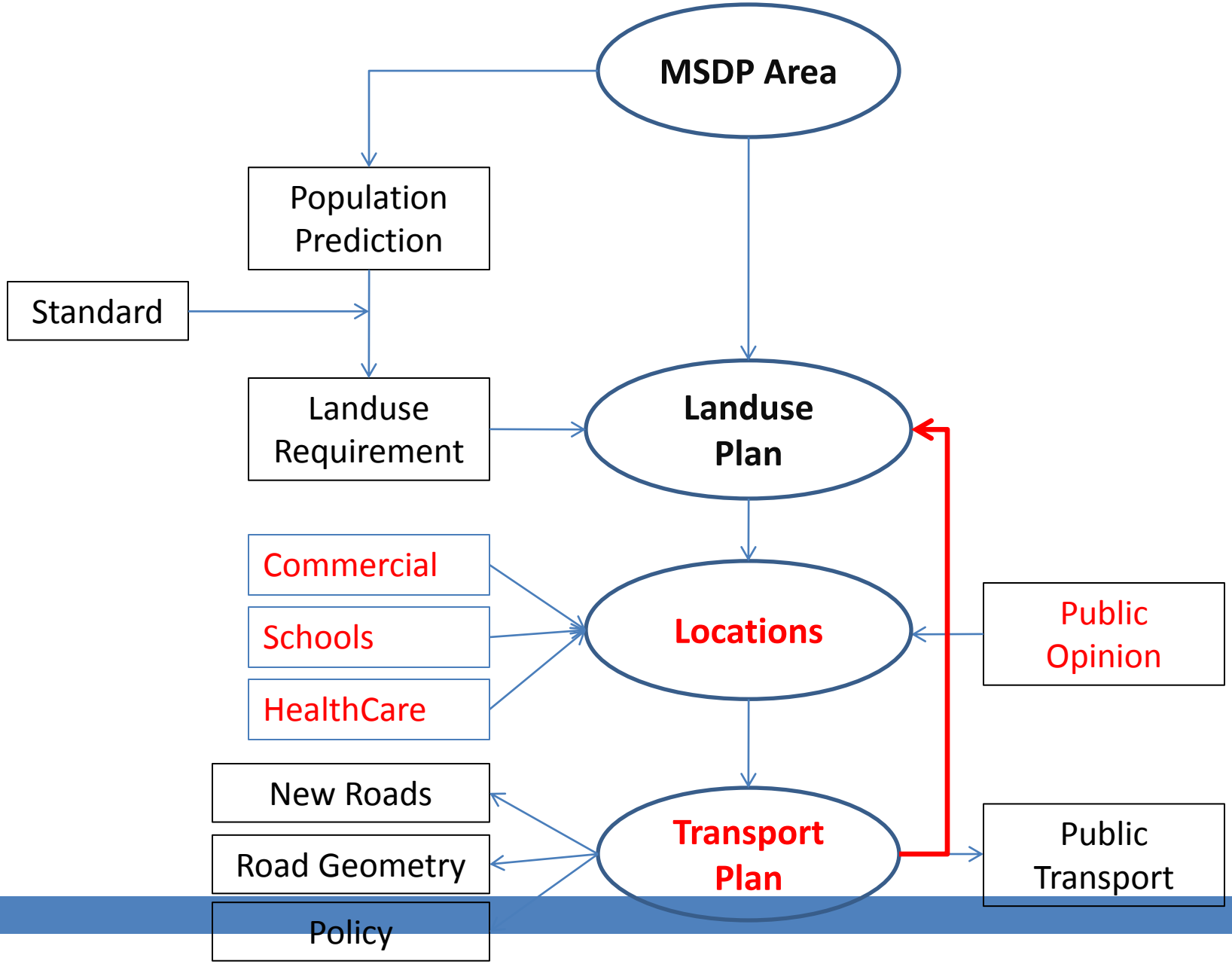
Buildings in Mymensingh



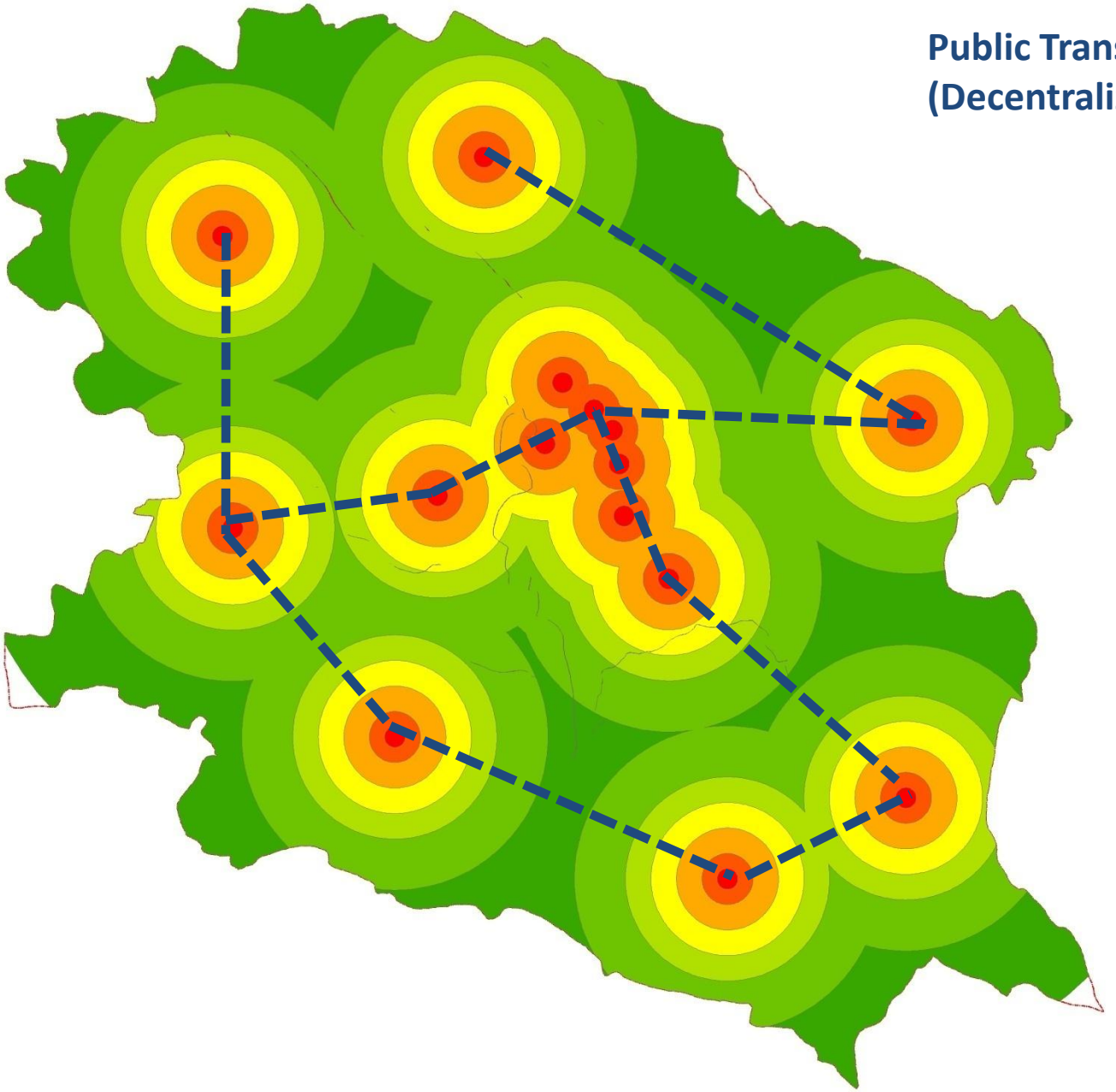
Mode Choice


10.17%
3.55%
4.02%
3.55%
0.95%
8.98%
15.37%
53.43%
Rickshaw
Van
Cycle
Motor Cycle
Car
Microbus
Bus
Walking

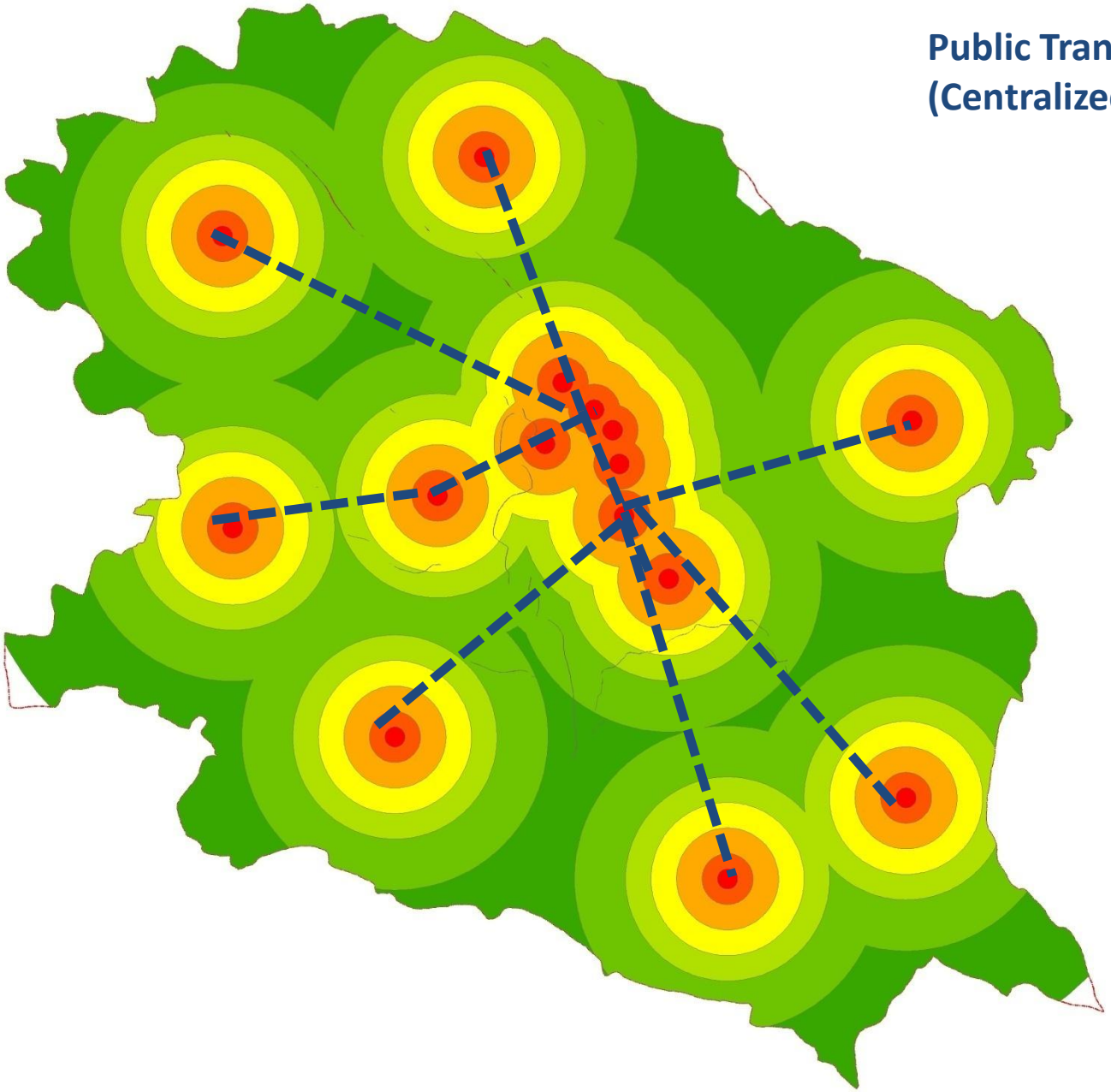
Transport Planning Component in MSDP



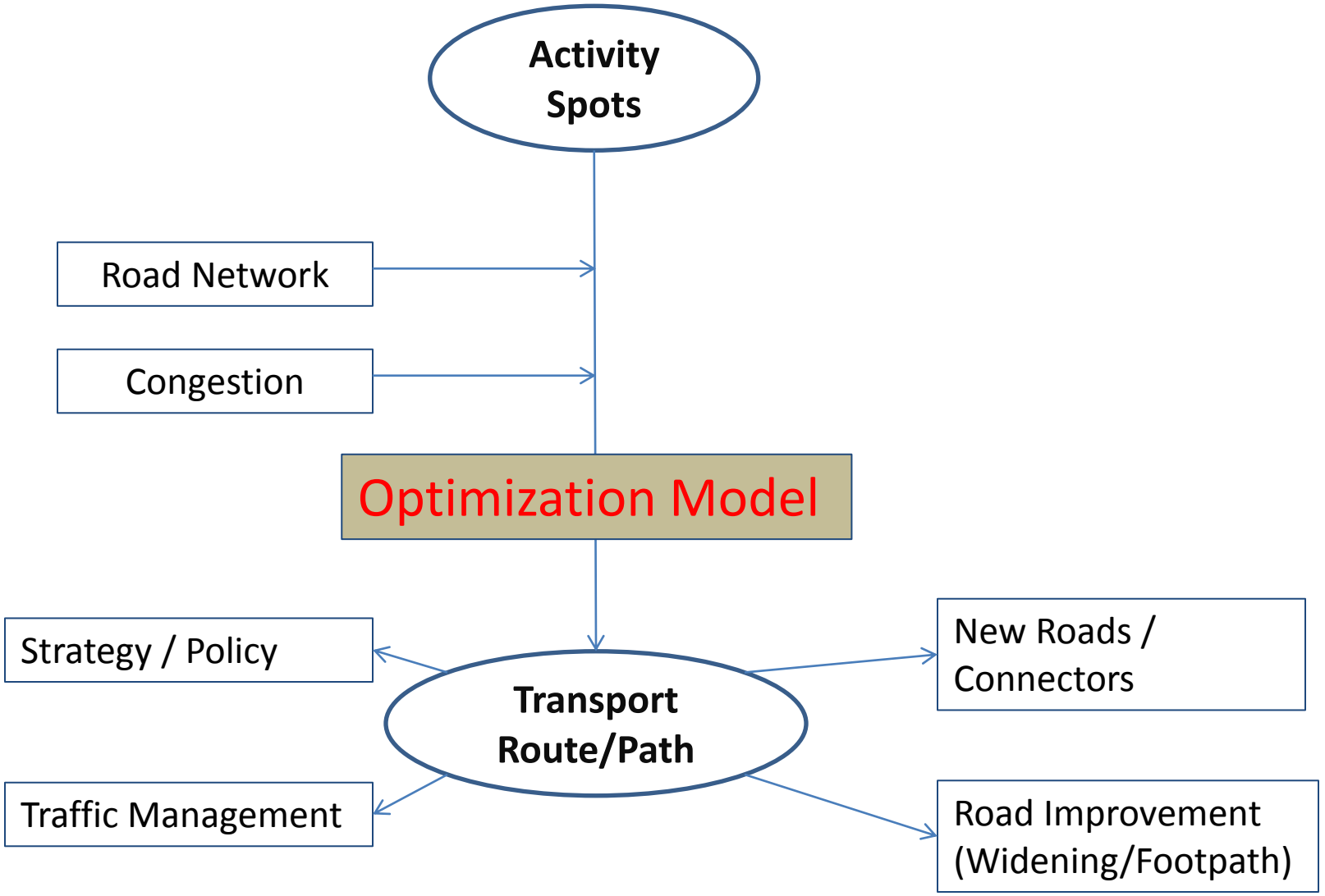
Activity Hub and Connectivity



Activity Hub and Connectivity



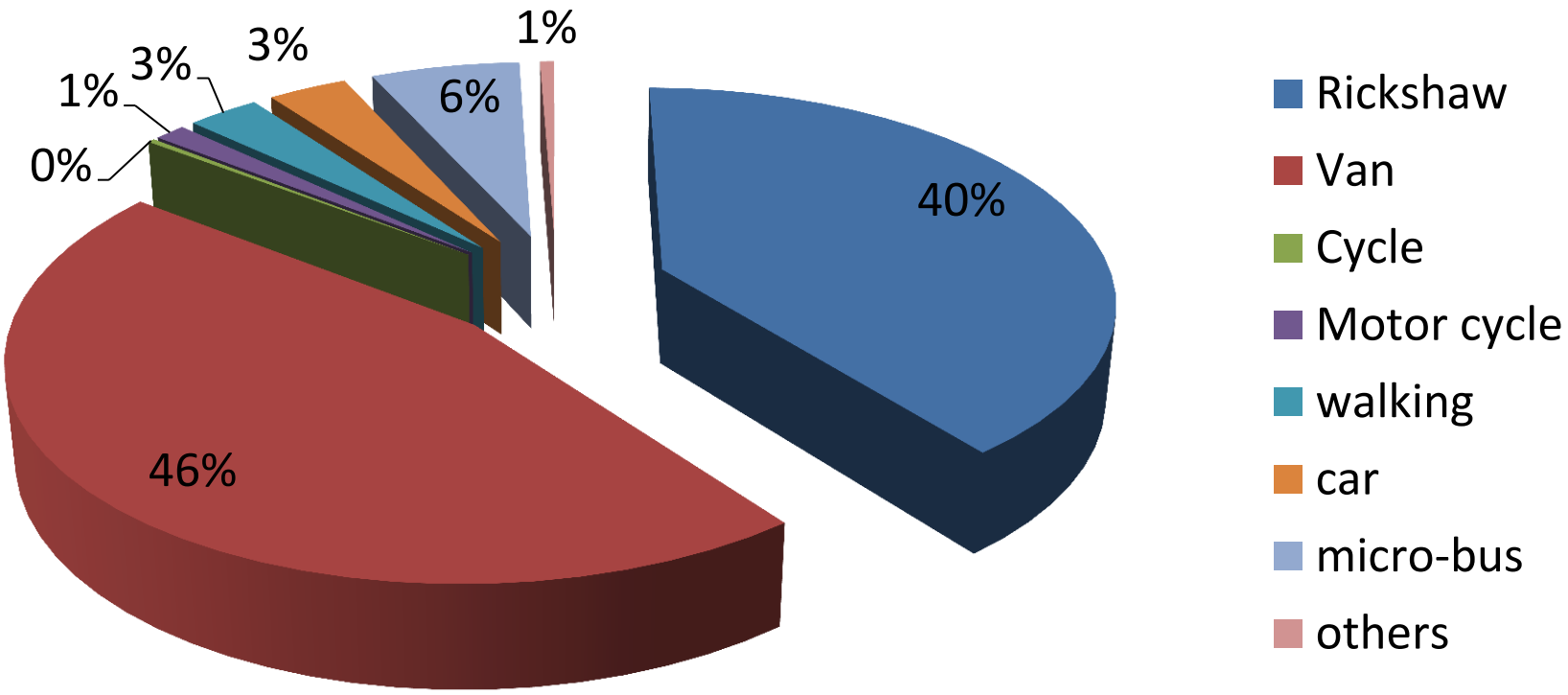
Proposed Approach for Addressing Transportation Issue in the MSDP



Transportation System in MSDP

Mode

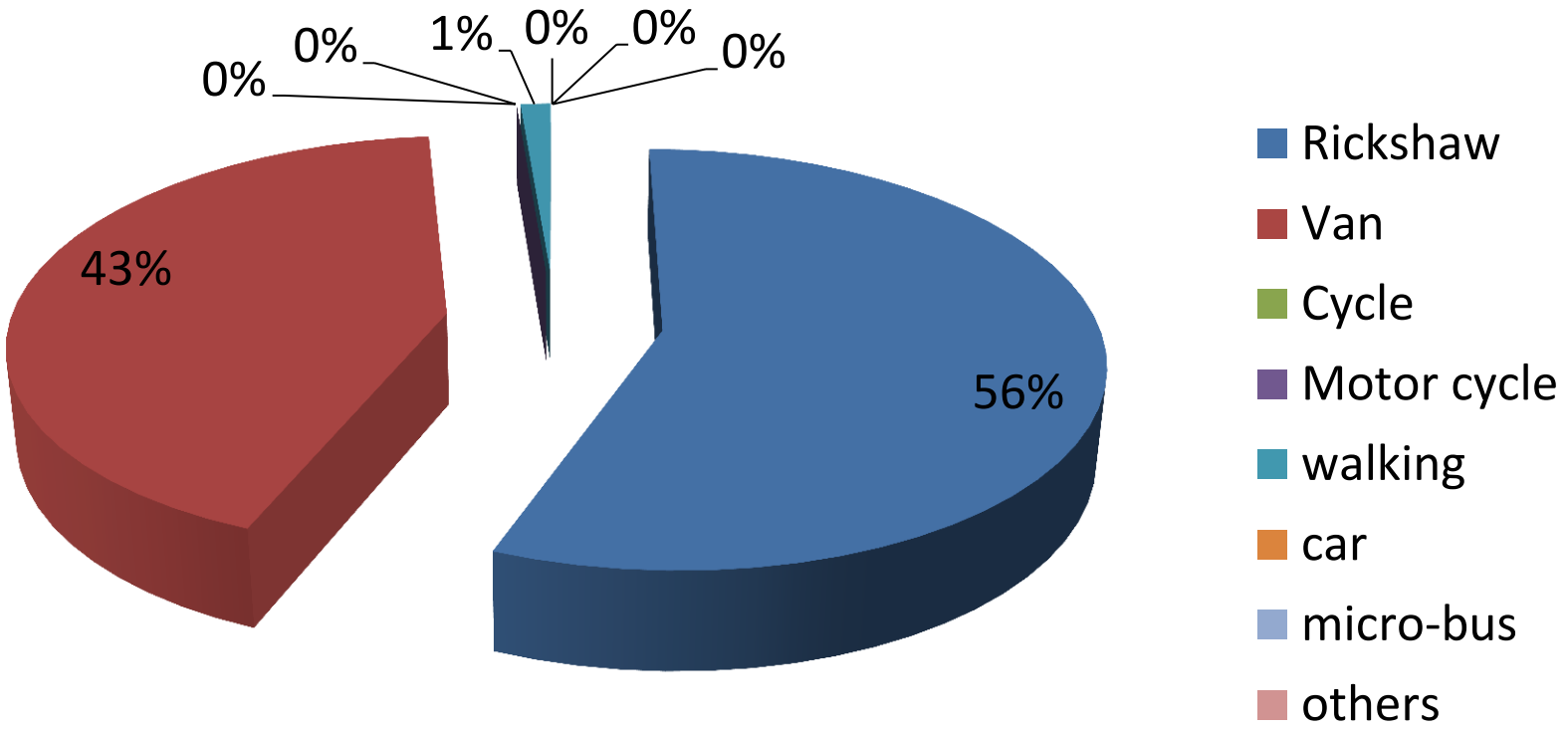
Mode for working purpose



Transportation System in MSDP

Mode

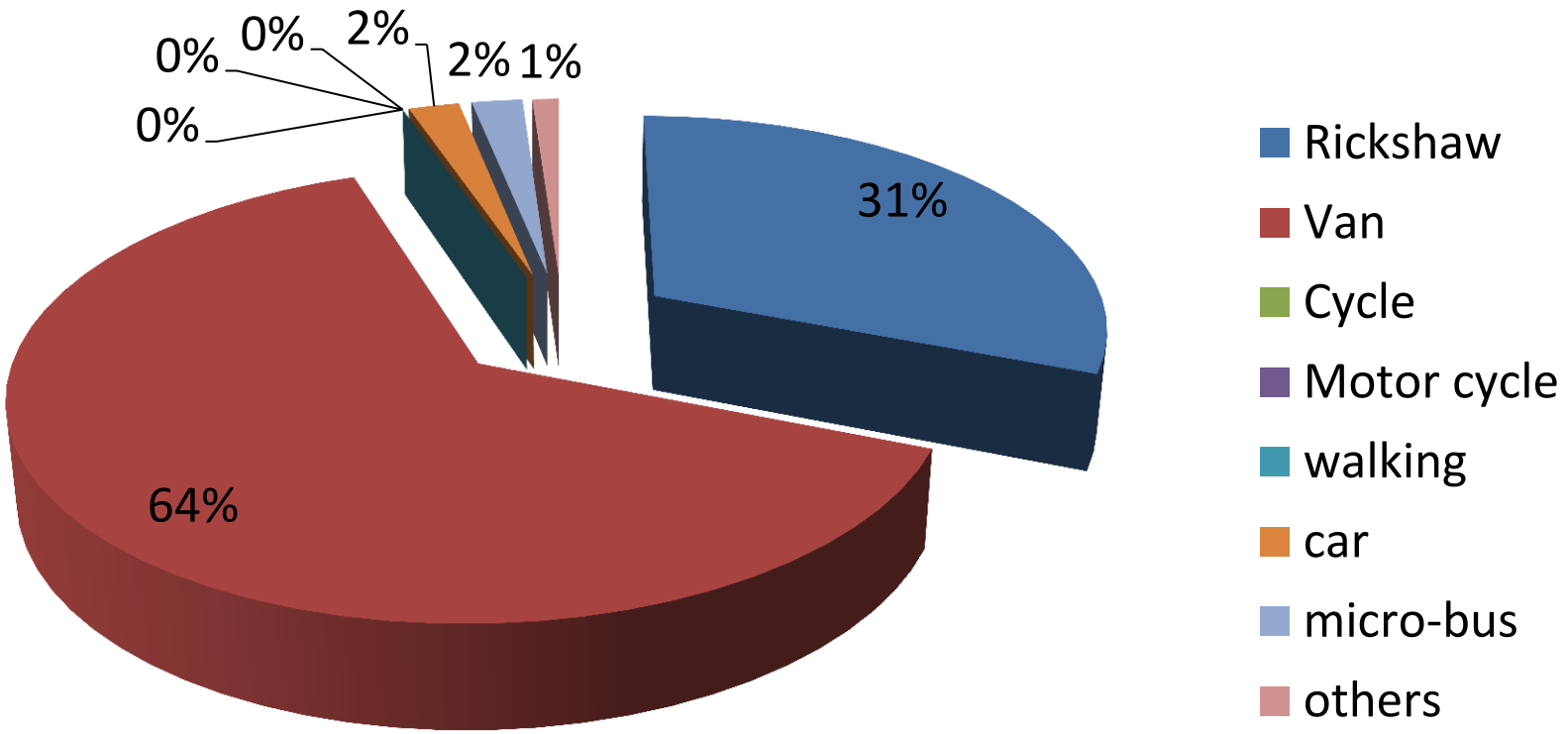
Mode for shopping purpose



Transportation System in MSDP

Mode

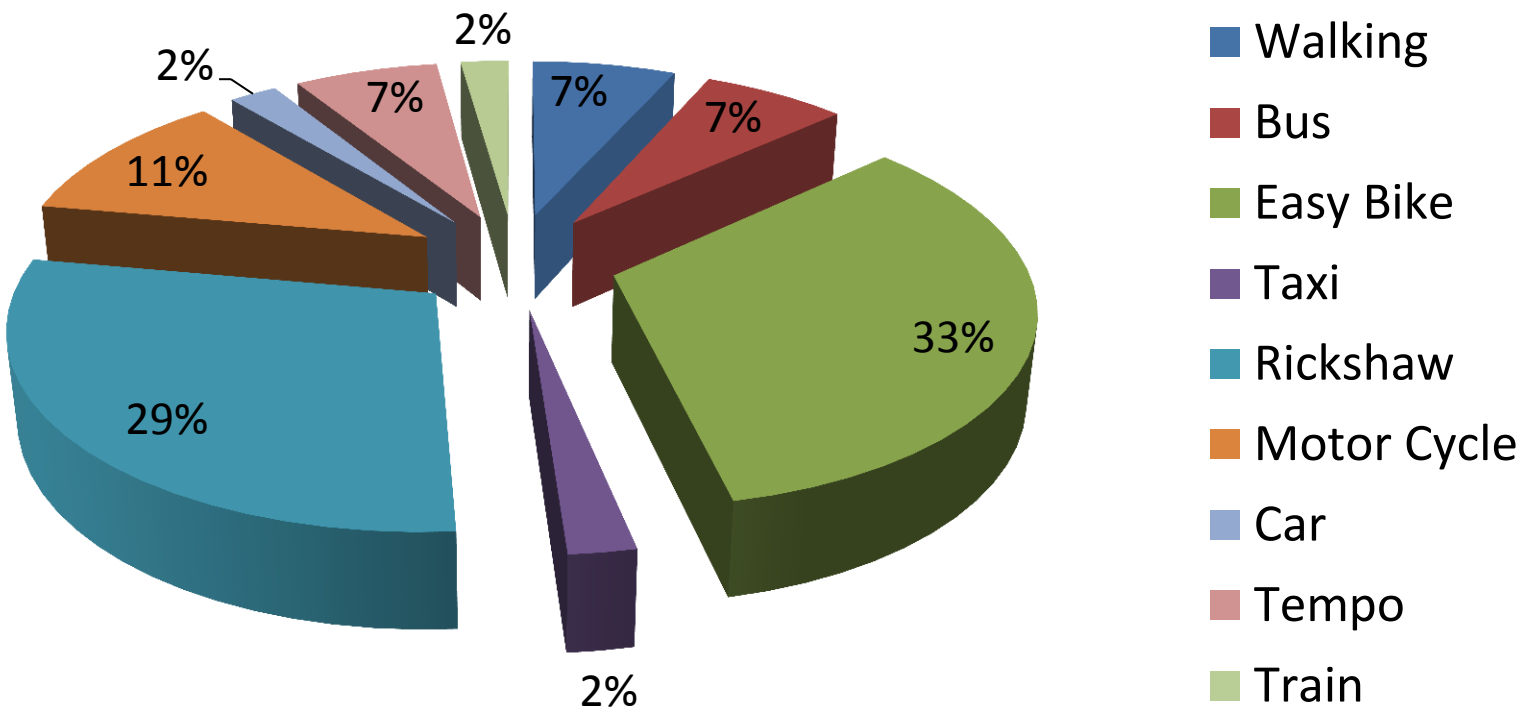
Mode for educational purpose



Transportation System in MSDP

Mode

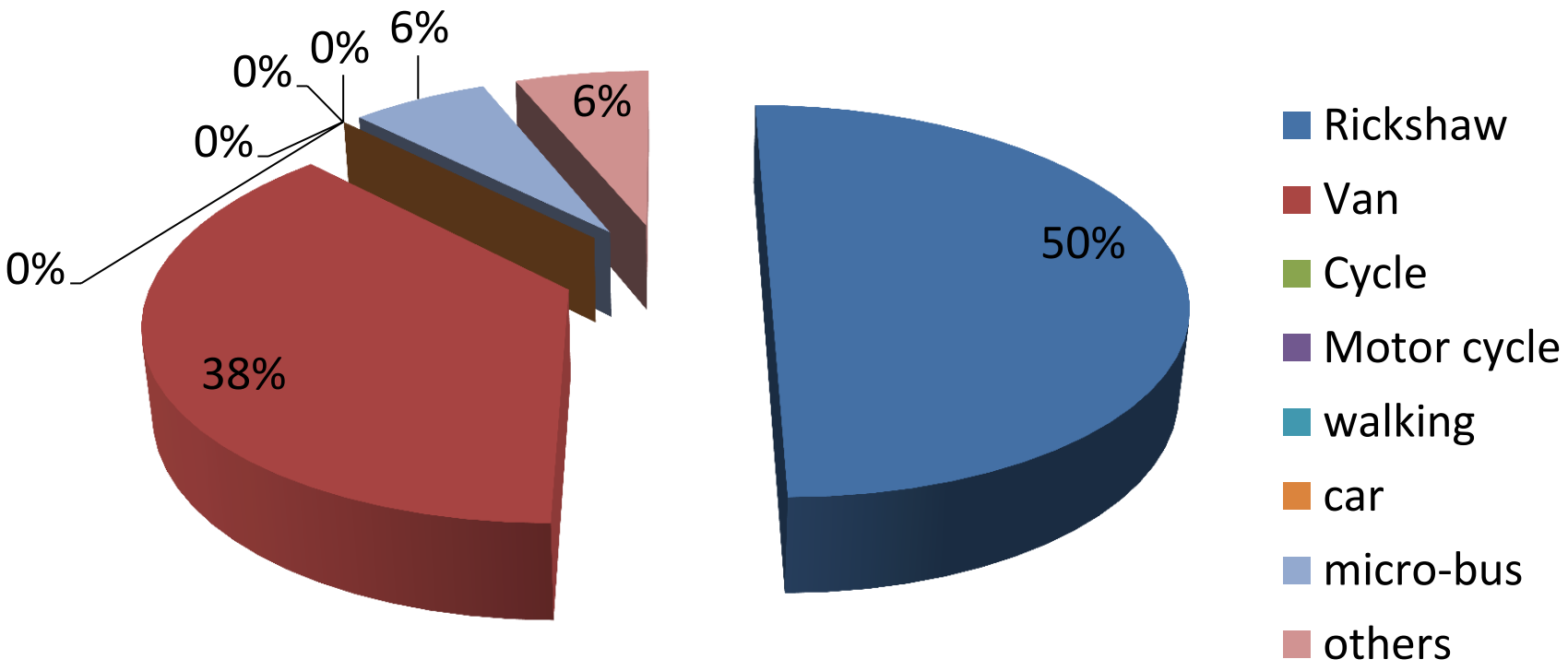
Mode for social purpose



Transportation System in MSDP

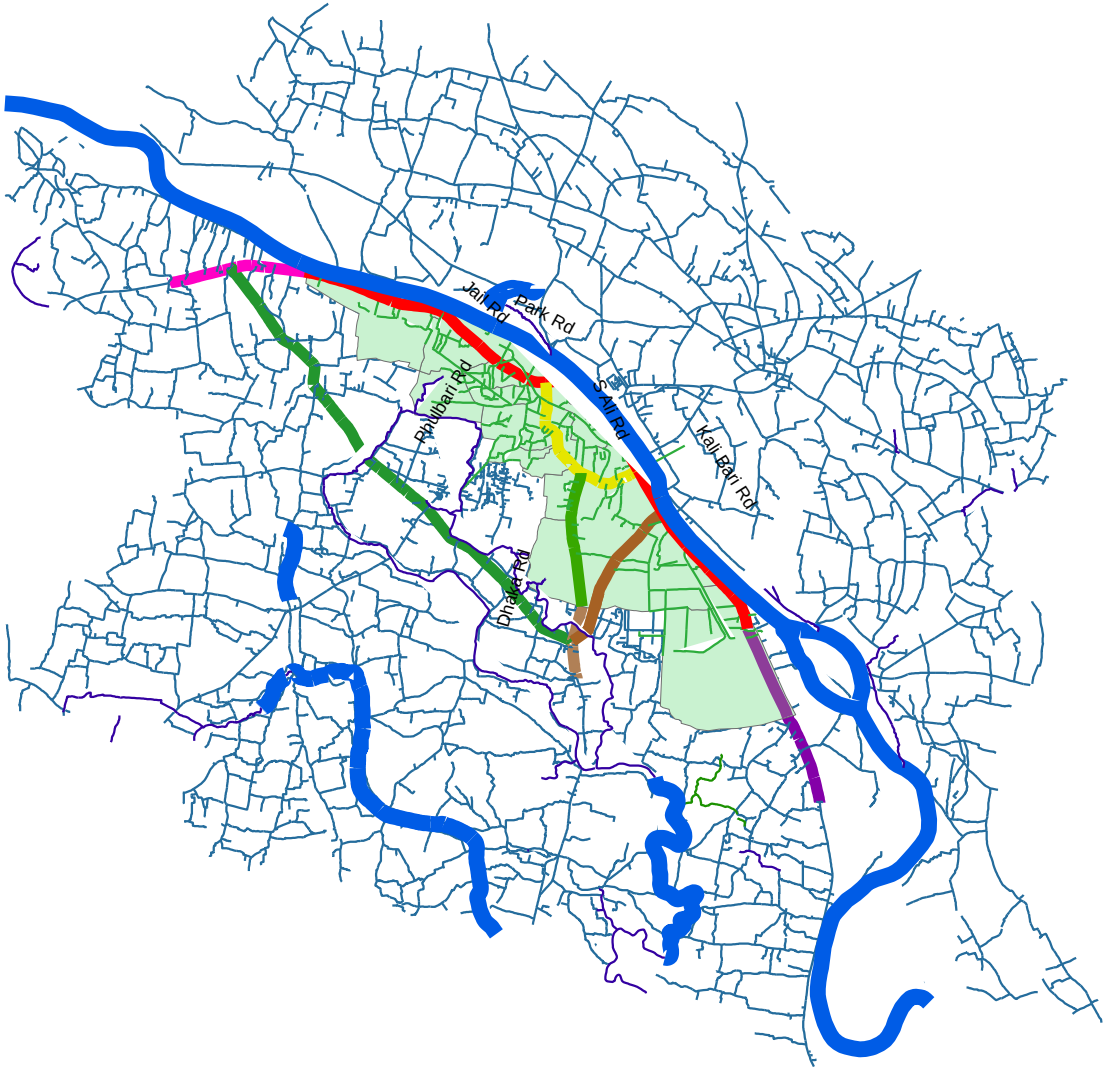
Mode

Mode for other purpose



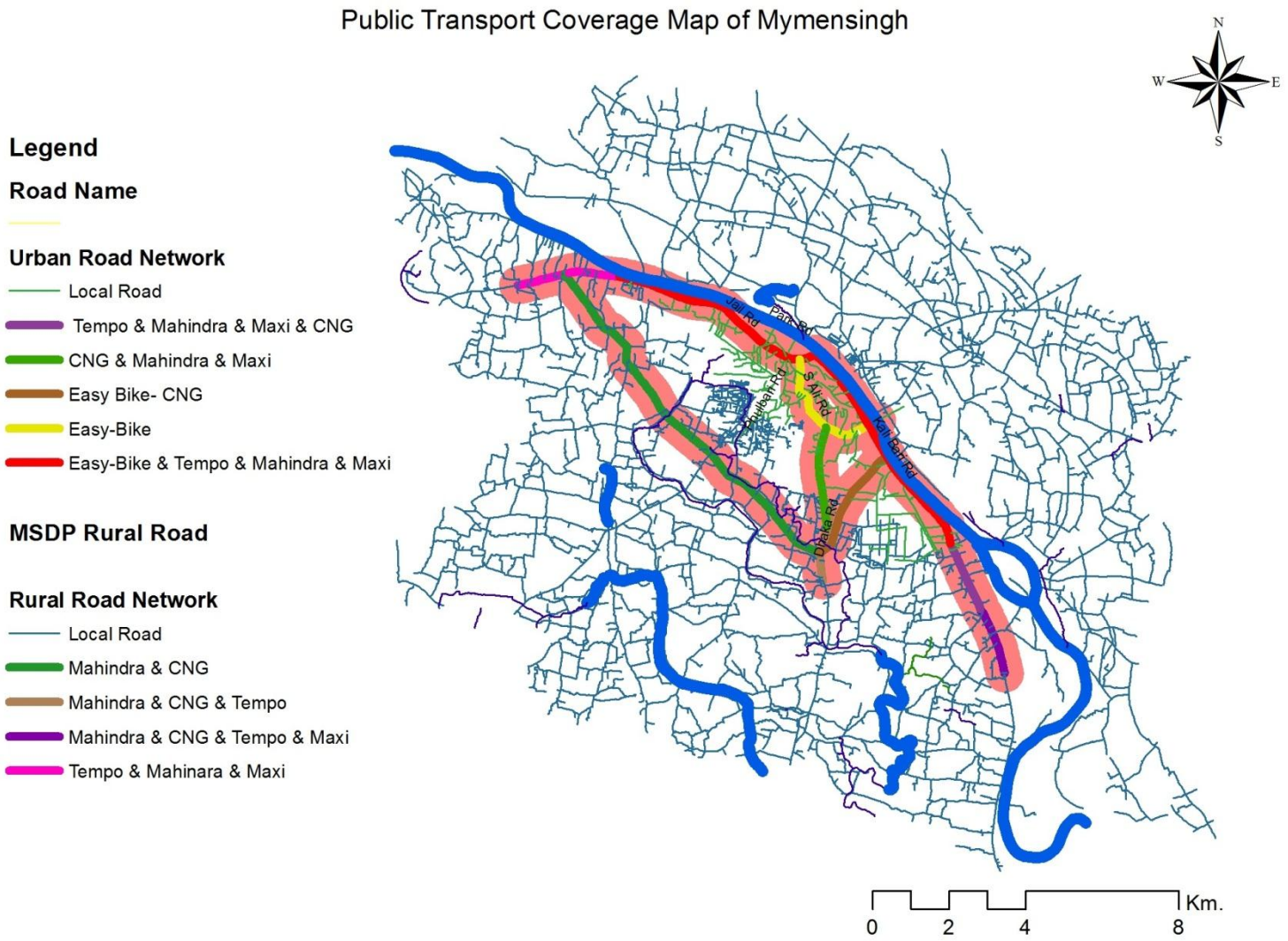
Transportation System in MSDP

Easy Bike Route

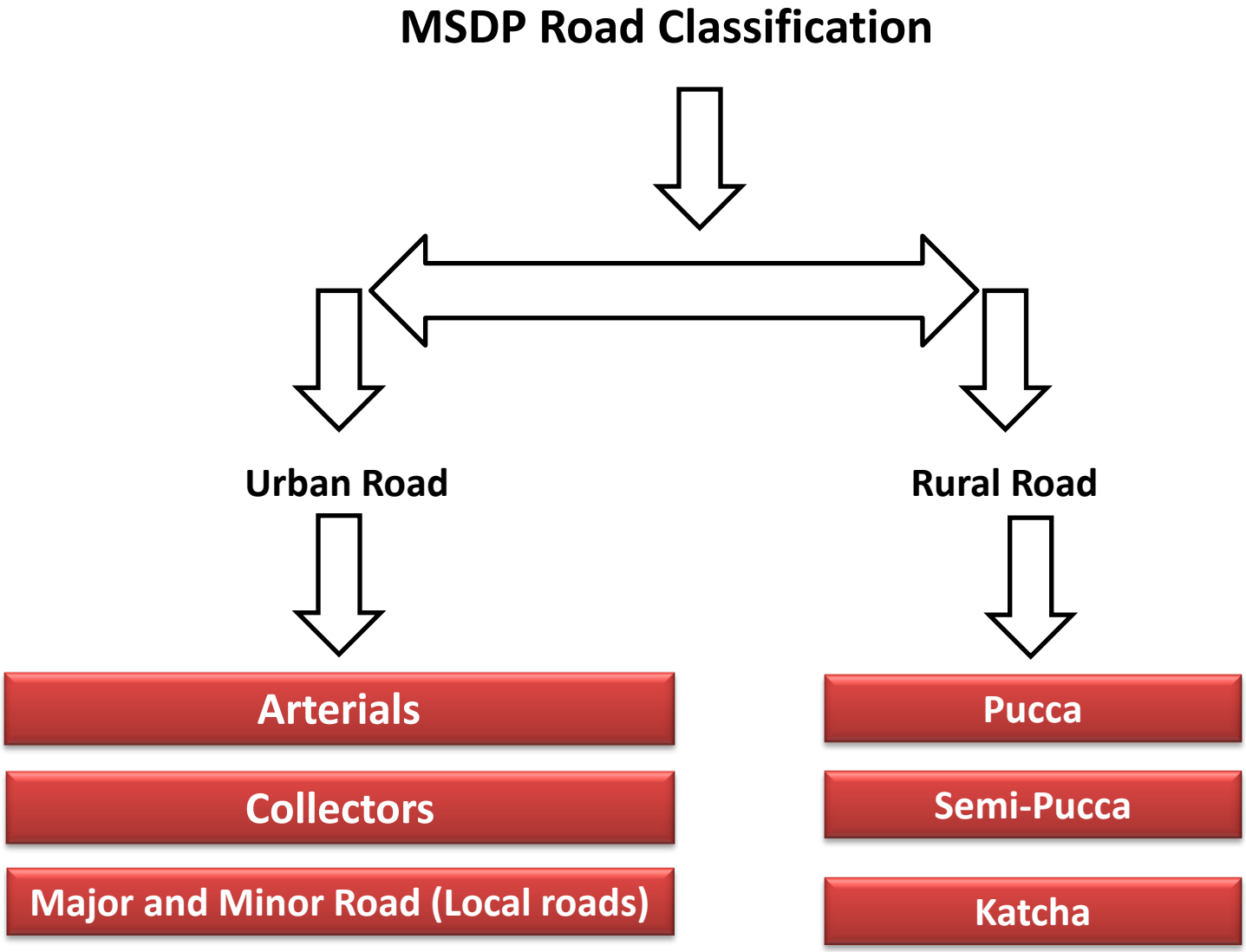


Transportation System in MSDP

Public Transport Coverage



Road Network



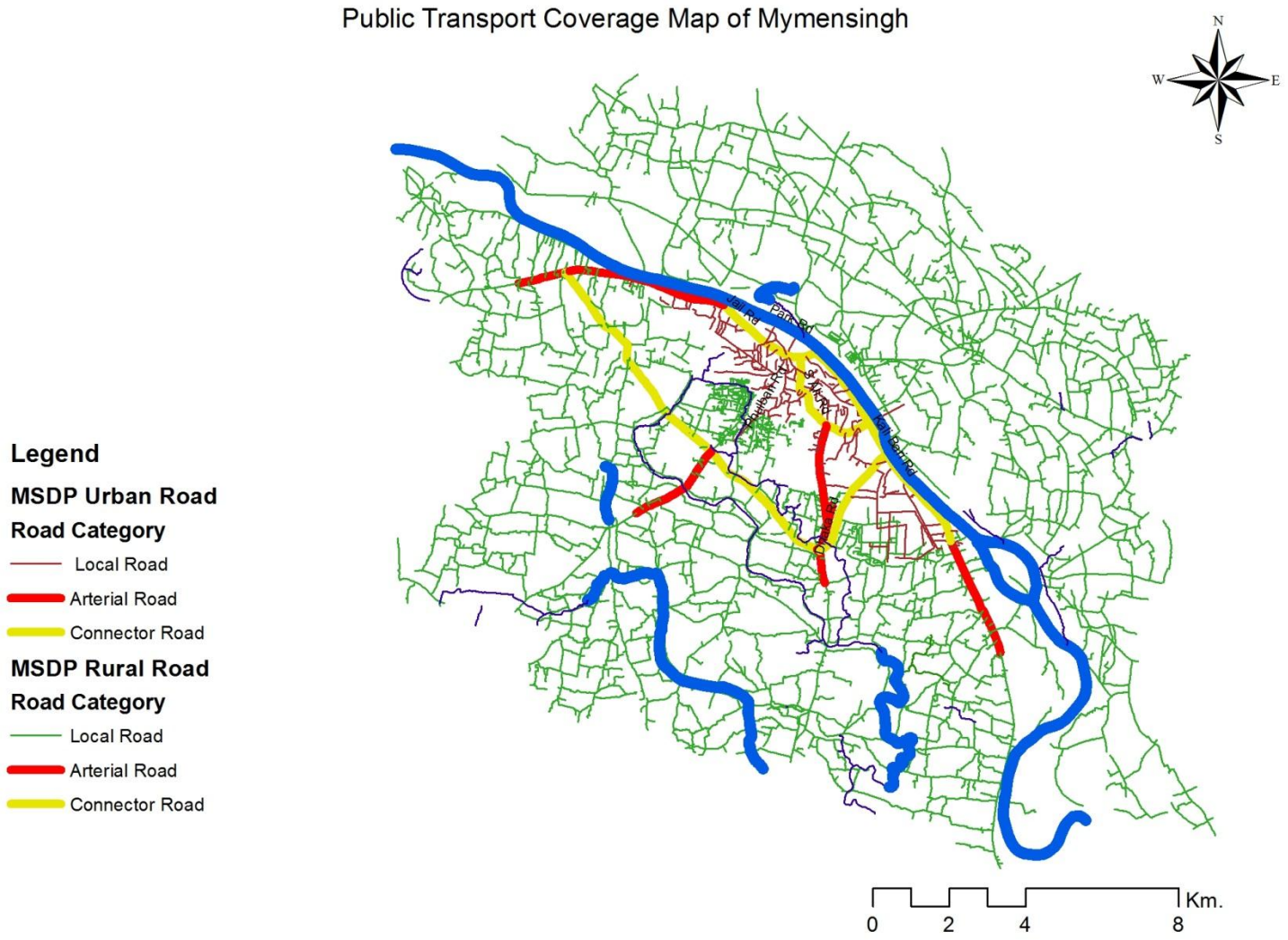
Road Network

MSDP Road Classification

MSDP Road Classification	Class	Length (Km.)
Urban Road	Arterial Road	**7.34**
	Connector Road	**16.10**
	Major and Minor Road (Local Roads)	**68.14**
Rural Road	Pucca	**248.47**
	Semi-Pucca	**22.20**
	Katcha	**676.52**
	Unknown	**0.06**

Road Network

MSDP Road Classification



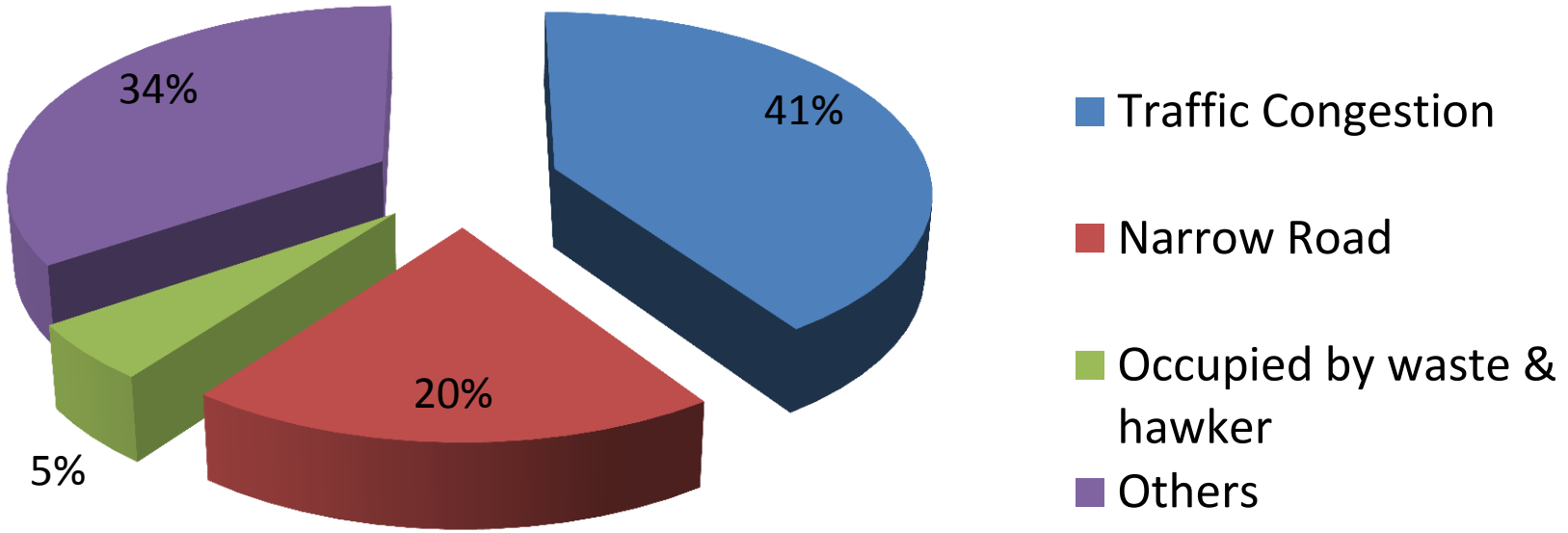
Road Network

MSDP Road Classification

Type of local road of the Household

Type of Local Road of the House	Condition of Main Road		Total
	Good Condition	Bad Goodition	
Bitumine	69.3	31.2	67.1
Brick-dust	13.1	35.4	14.4
Brick Covered	11.3	10.4	11.3
Raw	6.3	22.9	7.2
Total	100.0	100.0	100.0

Problem faced by the city dwellers



Travel Behavior

Mode

Transport Mode is used for the Purpose of Travel

Mode	Purpose of Travel in Percentage (%)						Total
	Going to Workplace	School/College/ University/Educa -tional Institution	Shopping	Picnic/ Entertainment / Sports	Visiting to Relatives	Others	
Rickshaw	39.5	30.9	56.0	41.5	44.4	50.0	40.4
Van	45.8	63.8	42.7	35.8	11.1	37.5	46.0
Cycle	.3	.0	.0	.0	.0	.0	.2
Motor cycle	1.3	.0	.0	.0	.0	.0	.9
walking	3.0	.0	1.3	.0	.0	.0	2.3
car	3.3	2.1	.0	.0	5.6	.0	2.7
micro-bus	6.2	2.1	.0	22.6	38.9	6.2	6.9
others	.6	1.1	.0	.0	.0	6.2	.7
Total	100	100	100	100	100	100	100

Travel Behavior

Mode

Transport Mode used to Go to Medical Institution

Medical Institution	Transport mode used to go to Medical institution in percentage (%)						Total
	Don't go any where	Walking	Rickshaw	Van	Easy Bike	Others	
Don't go any where	89.5	0	0	0	10.5	0	100.0
Degree Holder Doctor	0	9.7	79.0	0	11.3	0	100.0
Govt. Hospital	0	14.7	78.8	.0	6.0	.5	100.0
Private Clinic	0	0	94.4	5.6	0	0	100.0
Community Clinic	0	0	100.0	0	0	0	100.0
Pharmacy (Practitioner)	0	50.0	50.0	0	0	0	100.0
Hakiim/Kabiraz	0	100.0	0	0	0	0	100.0
Total	5.8	12.7	73.9	.3	6.9	.3	100.0

Travel Behavior

Mode

Transport Mode used to go for Leisure Facility

Source of Leisure Facility	Transport used to go for Leisure Facility in Percentage (%)							Total
	Don't go any where	Rickshaw	Van	Motor Cycle	Car	Micro bus	Walking	
Don't go any where	100.0	0	0	0	0	0	0	100.0
Play Ground	0	60.4	36.6	0	0	0	3.0	100.0
Place of natural beauty	0	16.2	82.0	.9	.9	0	0	100.0
Shopping mall	0	13.8	81.2	0	1.2	0	3.8	100.0
Park	0	14.1	83.7	.3	.7	.3	1.0	100.0
Club	0	0	100.0	0	0	0	0	100.0
Tourist Spot	0	0	85.7	0	0	14.3	0	100.0
Brahmaputra river	0	23.2	74.2	0	.5	0	2.1	100.0
Fair	0	25.0	68.8	0	0	0	6.2	100.0
Cinema hall	0	16.7	83.3	0	0	0	0	100.0
Total	2.1	21.8	73.3	.2	.6	.2	1.7	100.0

Travel Behavior

Cost

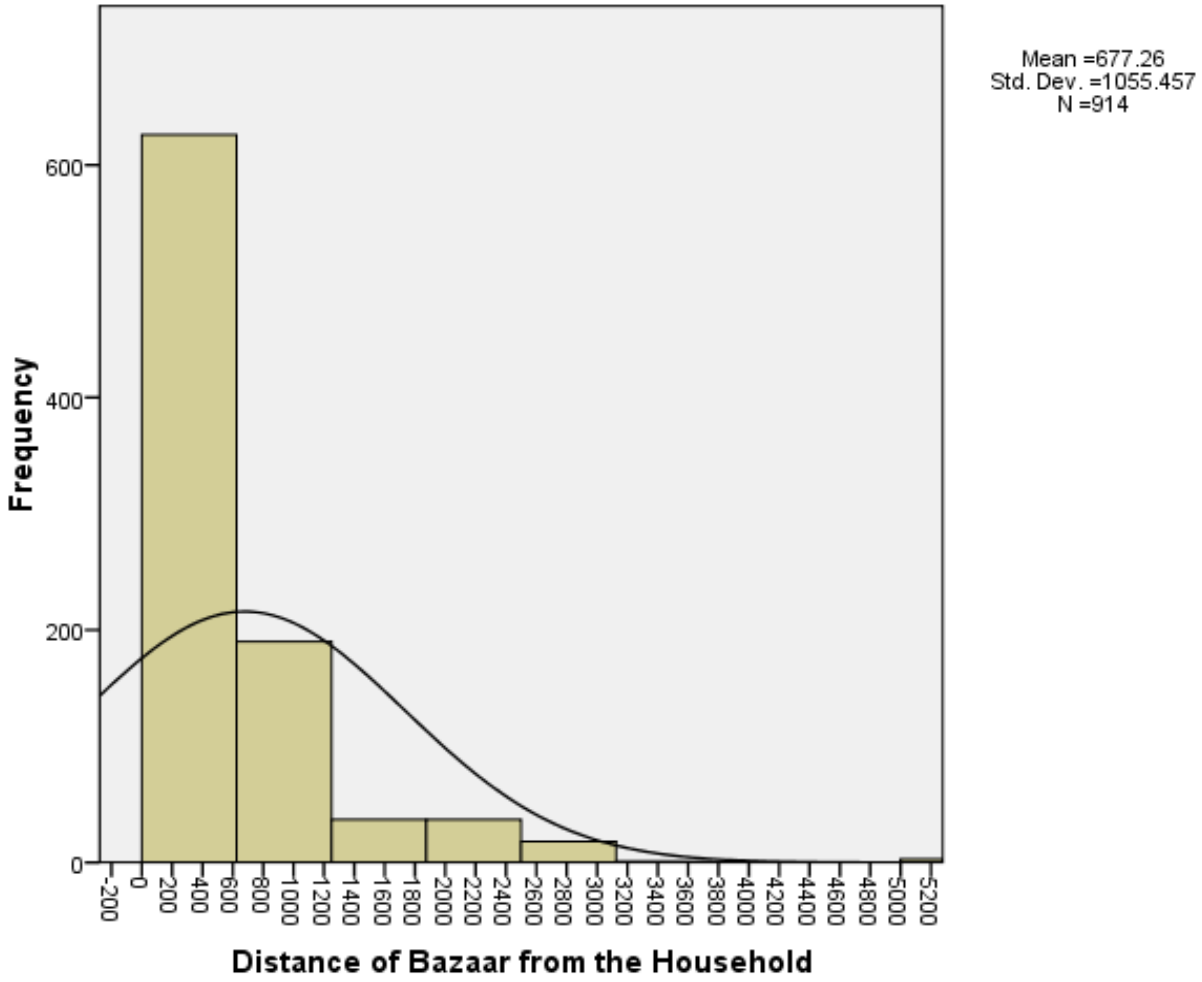
Average Cost for Trip Purpose

Average Cost for Trip Purpose	Urban (BDT)	Rural (BDT)
Cost For Work Trip Purpose	37.46	29.32
Cost For Shopping Trip Purpose	21.4	30.89
Cost For Educational Trip Purpose	26.17	32.95
Cost For Social Trip Purpose	31.67	62.92
Cost For Other Trip Purpose	66.24	213.33

Travel Behavior

Distance

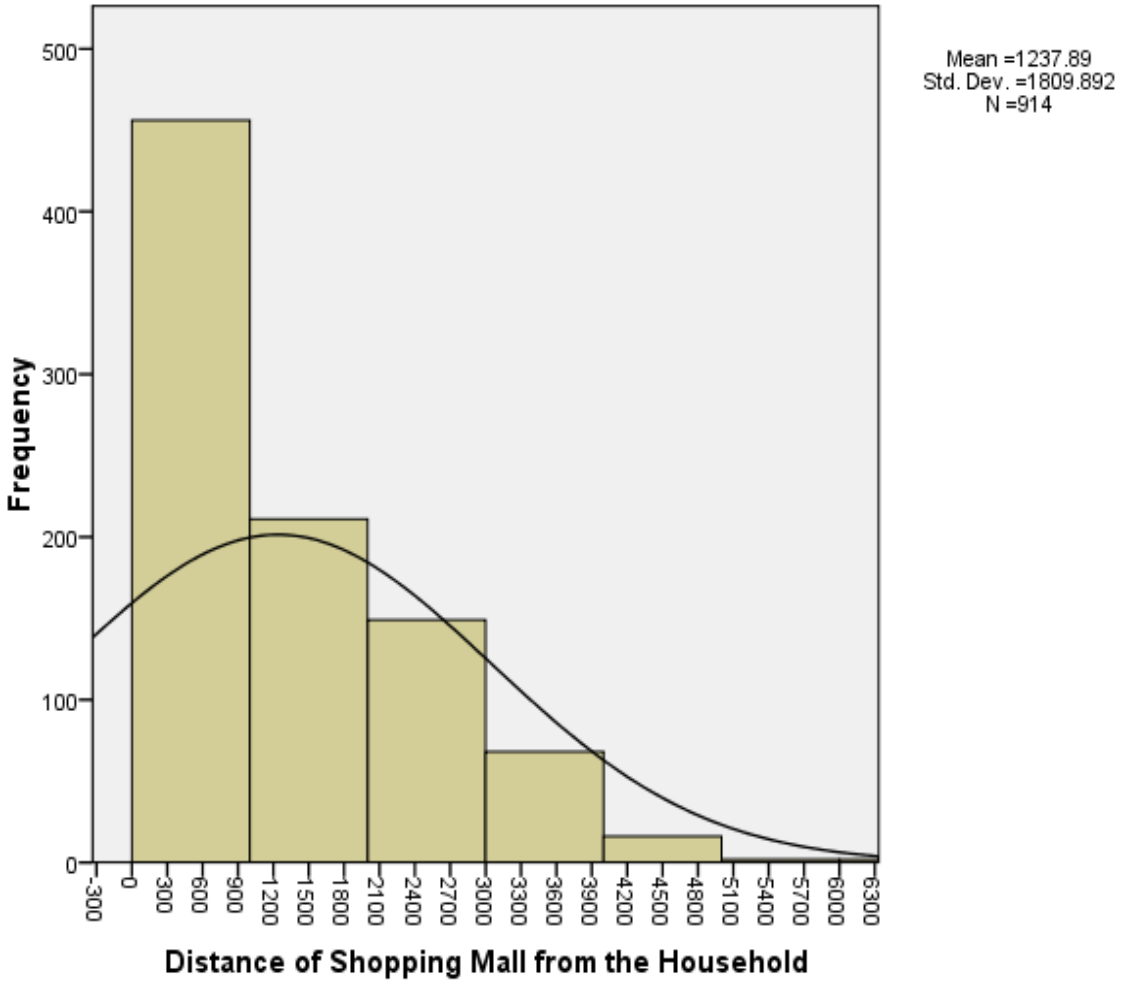
Travel Distance and Time from the Home to Bazar



Travel Behavior

Distance

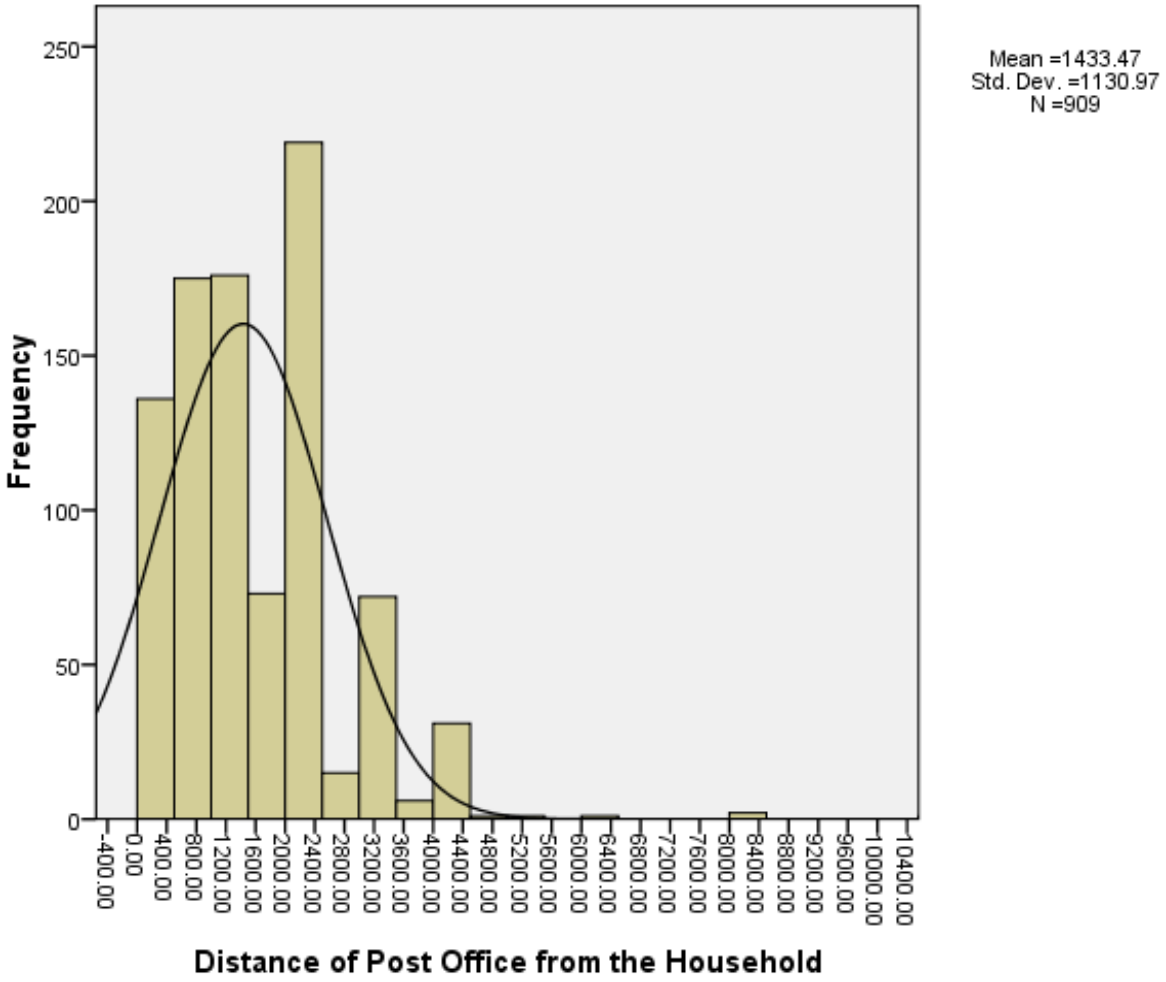
Travel Distance and Time from the Home to Shopping



Travel Behavior

Distance

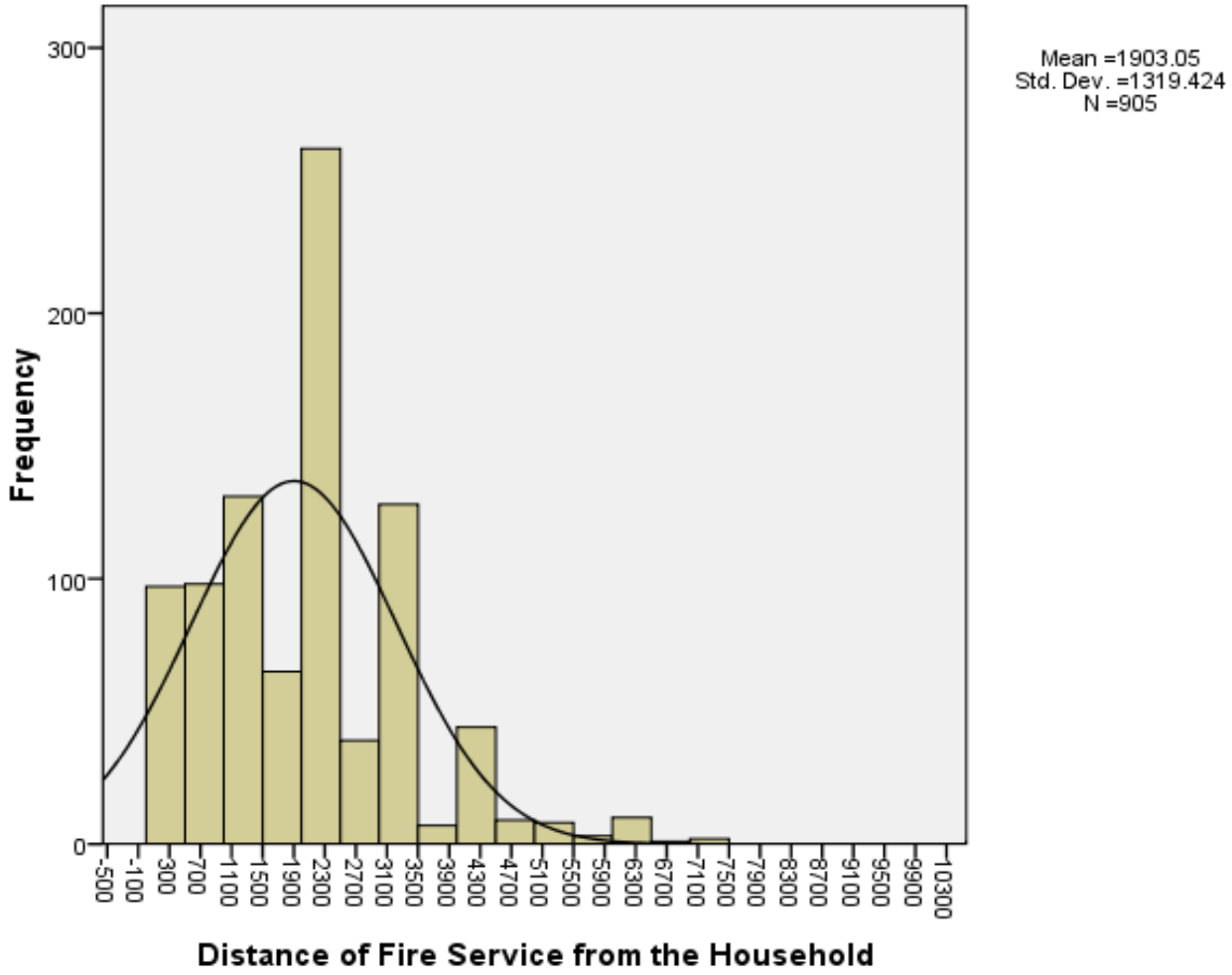
Travel Distance and Time from the Home to Post Office



Travel Behavior

Distance

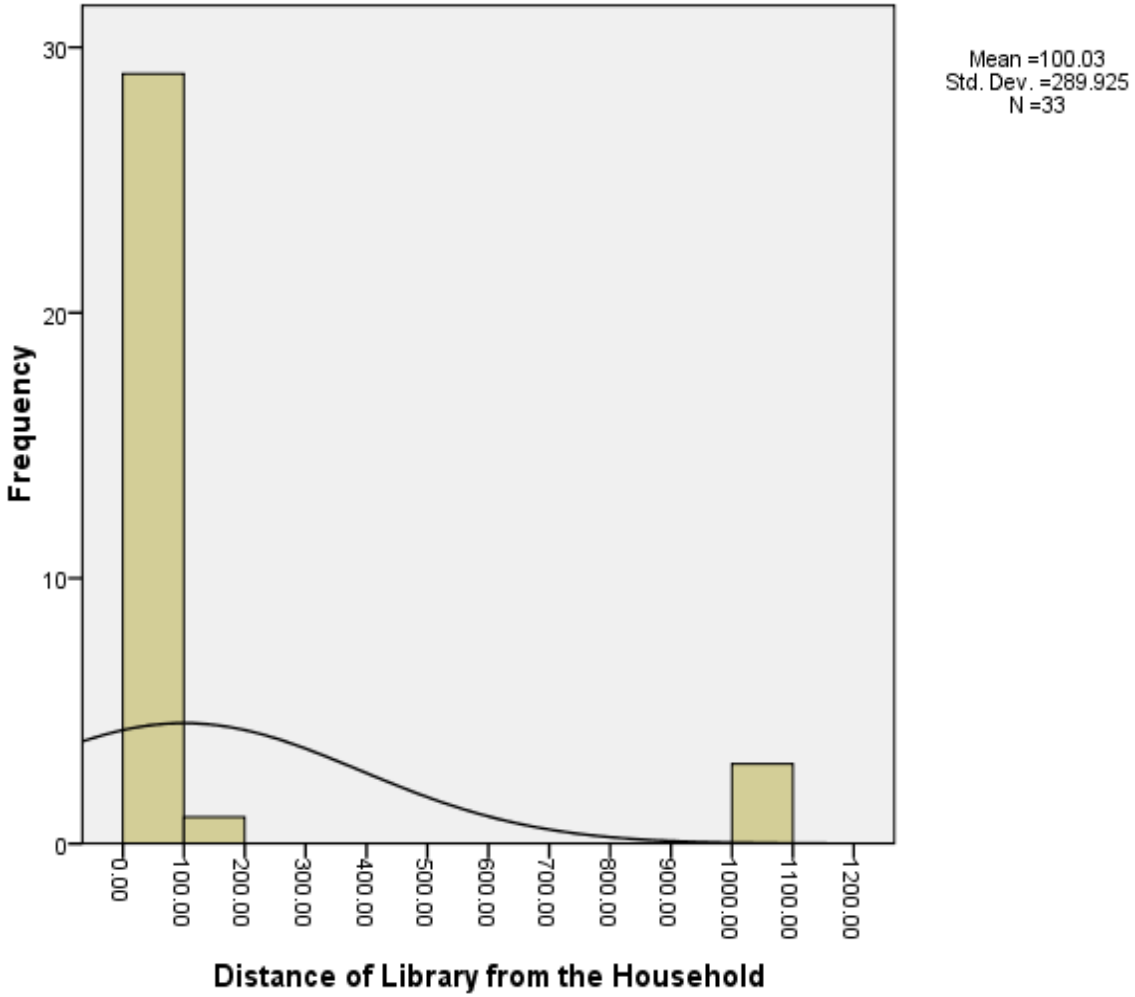
Travel Distance and Time from the Home to Fire Service Station



Travel Behavior

Distance

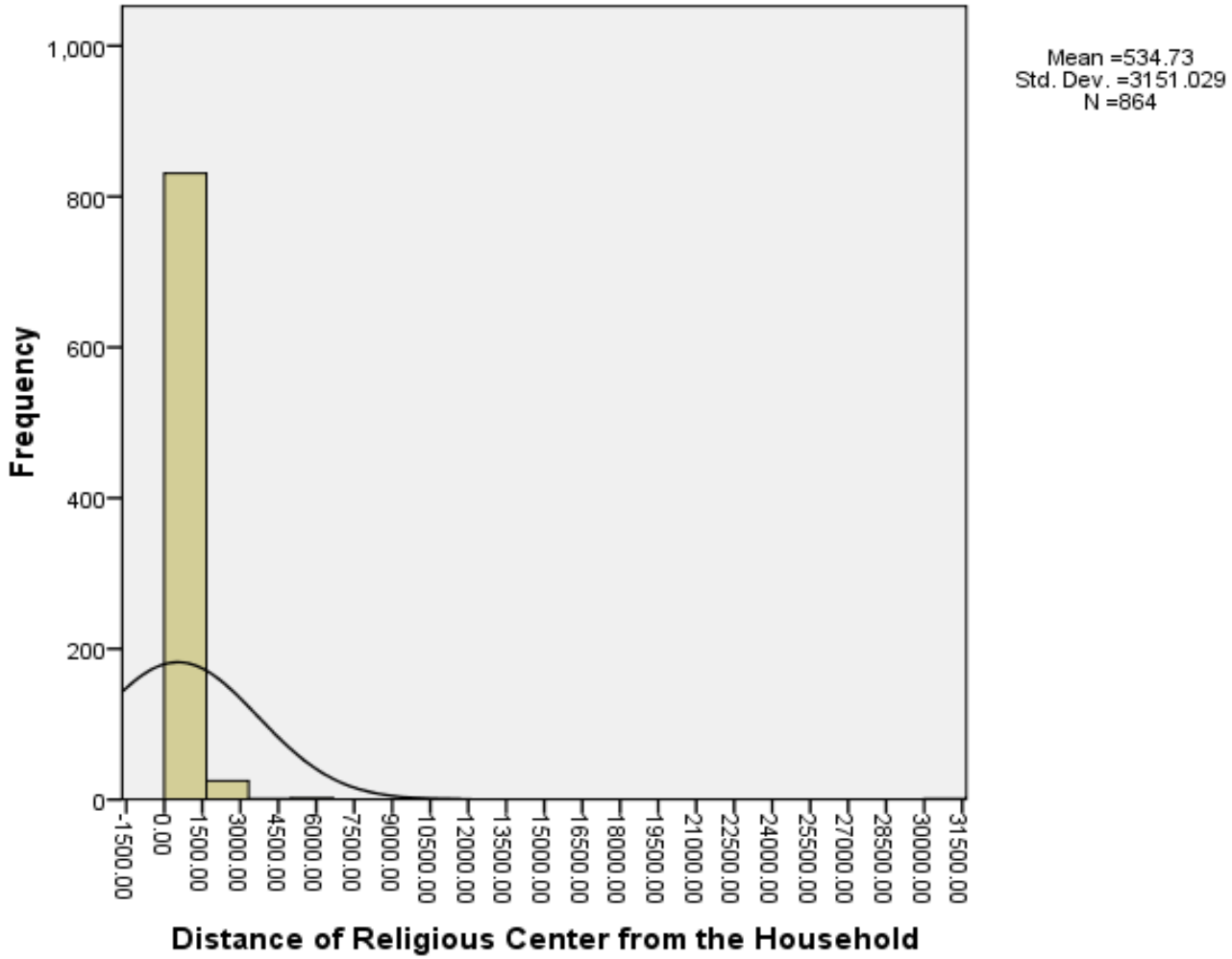
Travel Distance and Time from the Home to Library



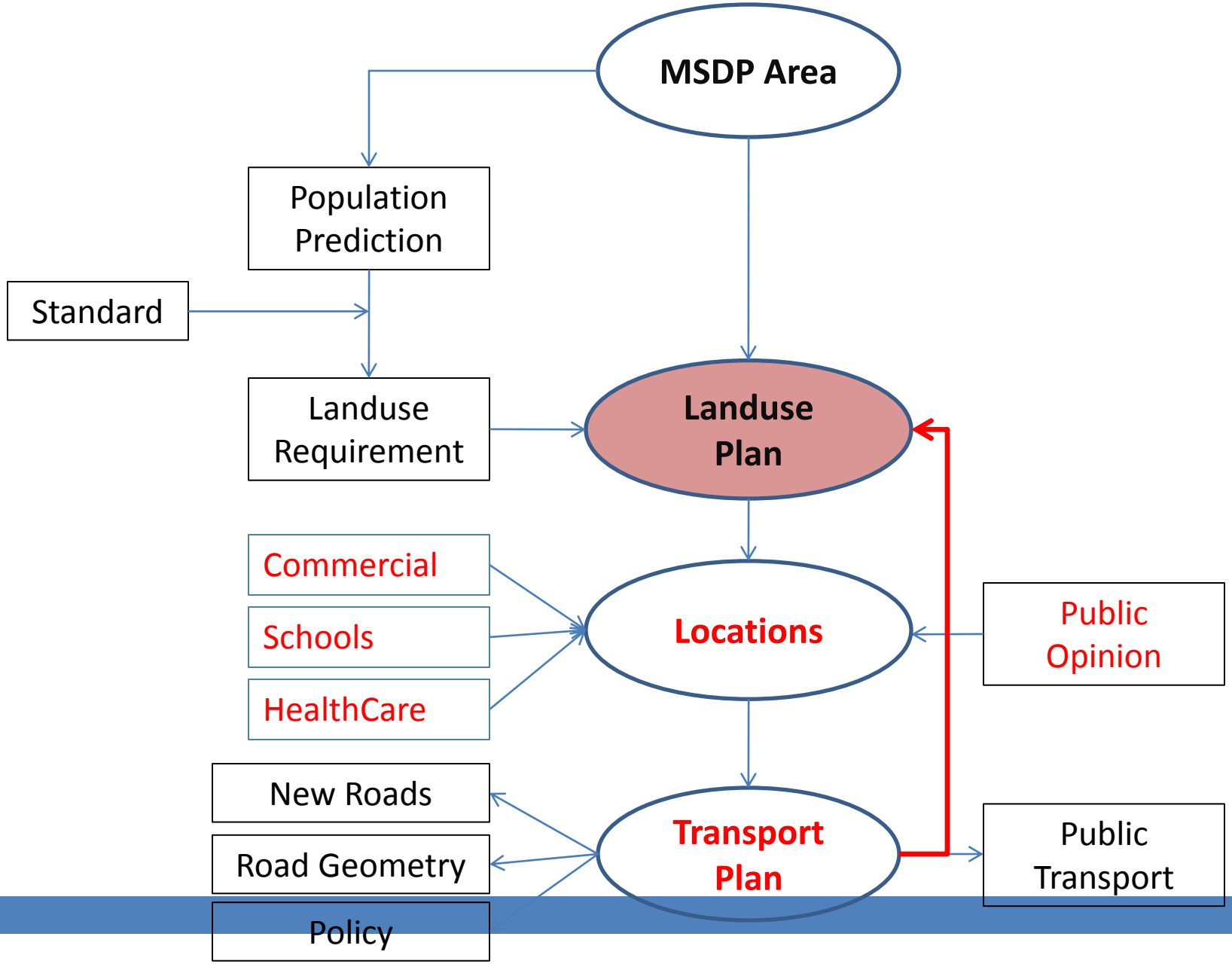
Travel Behavior

Distance

Travel Distance and Time from the Home to Religious Centre



Transport Planning Component in MSDP



Thank You