

COMPARATIVE SCENARIO ANALYSIS OF MYMENSINGH TOWN

MSDP Project 2011-2031

Objectives

- Evaluate how the city elements are spatially distributed over the city area (Like landuse, population, resources and facilities)
- Evaluated how different area of the city is getting the services & facilities
- Identify the exposed area of the city subject to different risk
- Evaluate the Connectivity of the city area

Methodology



City area is divided into 100 m X 100 m grid. Total no of Grid is 2160. each grid size is 1 Hectare.



34 elements are taken as parameter for the analysis



Parameters are examined by two ways:

1. Parameters/elements present within the grid
2. Parameters/elements are connected from the grid center through road network

Methodology

- Depending on element presents in the cell and network distance of the elements from grid center a hierarchy is created so that every cell can be comparable with other.
- Spatial Join operation is performed for populating the parameters/elements into the cell
- Network Analysis operation is performed for calculating the connectivity/ accessibility of the cell from the elements
- A scale is developed ranging 0 to 10. Where each cell is scored according to the distribution.
- A weightage factor is assign for each parameter depending on their merit.
- Finally all cell are converted into 100 score...

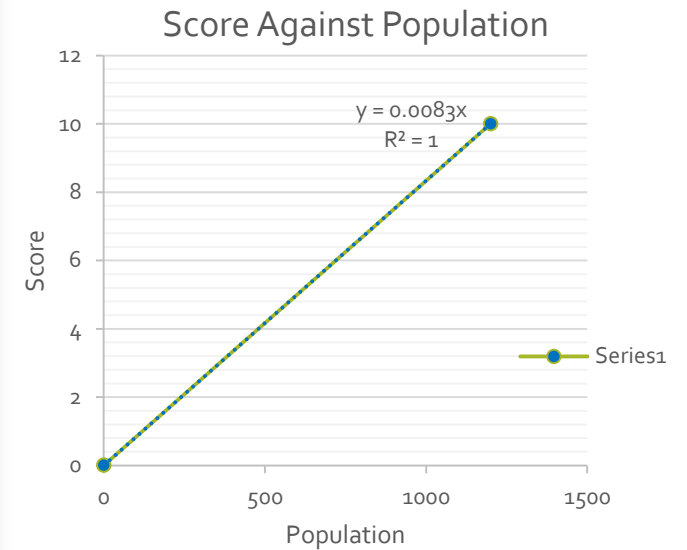
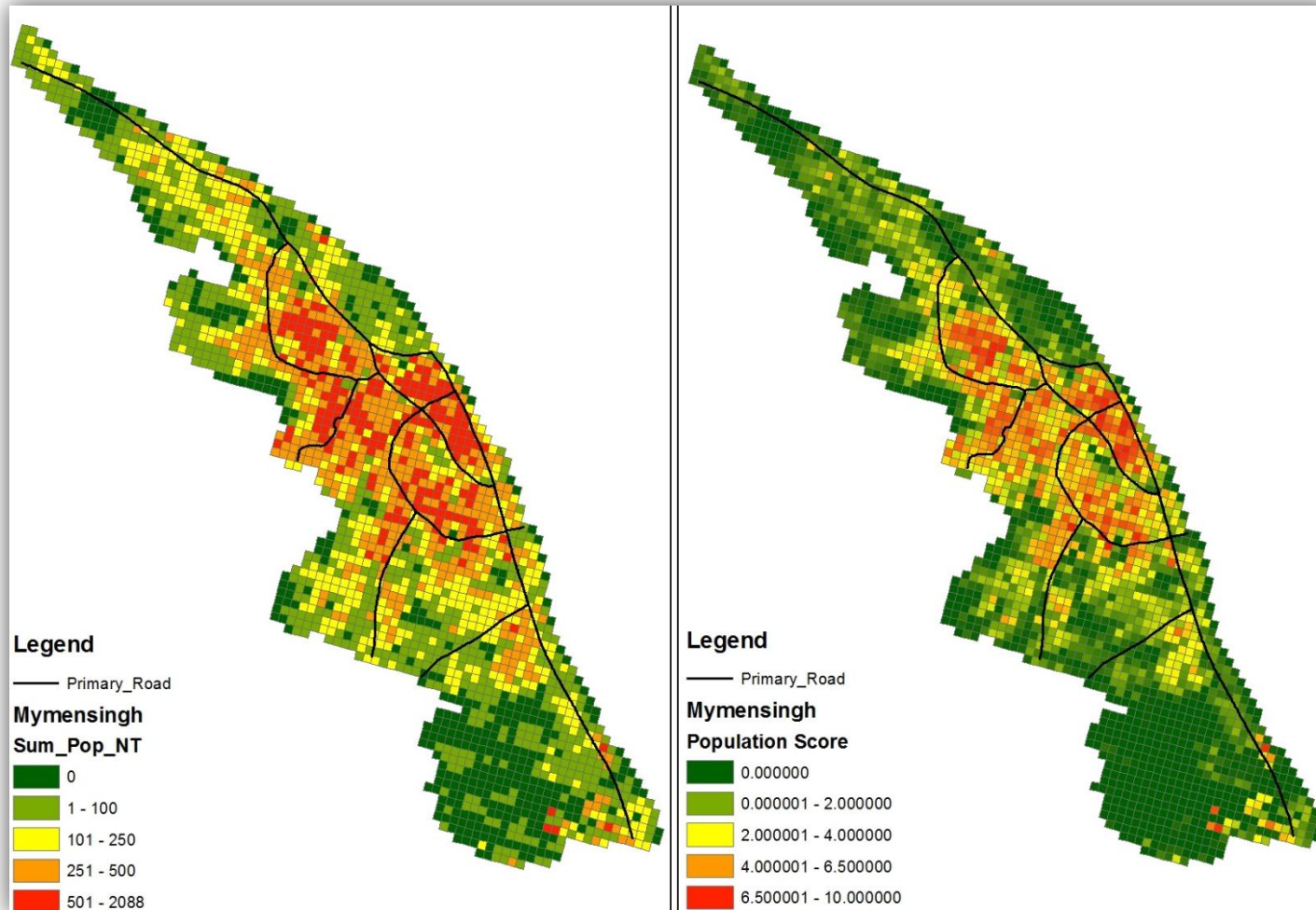
Weightage distribution of the variables for comparative analysis of the cell in Mymensingh municipality

S/N	item	quality	description	condition of variable	influnce of variable	Load distribution	Broad category	points	detail points
1	Pora_dist	point	distance from municipality office	quality outside cell	administrative influence	50%	1. Adminstrative	5	2
2	Upz_Dist	point	distnce from UPZ office	quality outside cell	administrative influence				1
3	DCOff_dist	point	distance from DC's office	quality outside cell	administrative influence				2
4	PriSch_Dist	point	distance from primary school	quality outside cell	educational influence		2. Education	6	1
5	Hghsch_dist	point	distance from high school	quality outside cell	educational influence				2
6	Col_dist	point	distance from college	quality outside cell	educational influence				2
7	Univ_dis	point	distance from college	quality outside cell	educational influence				1
8	Clic_Dstn	point	distance from clinic	quality outside cell	health serv. influence		3. Health	6	2
9	Hos_Dstn	point	distance from hospital	quality outside cell	health serv. influence				4
10	CityCent_distn	point	distance from city centre	quality outside cell	commercial influence		4. Commertial	7	5
11	Bzr_dstn	point	distance from bazar	quality outside cell	commercial influence				2
12	Park_distn	point	distance from park	quality outside cell	recreational influence		5. Recreational	3	2
13	River_distn	line	distance from brahmaputra river	quality outside cell	recreational influence				1
14	Lngth_prim	point	distance from primary road	quality outside cell	basic traffic influence		6. Transportationa	8	5
15	ImpNode_distn	point	distance frim important node	quality outside cell	basic traffic influence				3
16	Dhk_bus	point	distance from dhaka bus station	quality outside cell	regional service influence		7. Regional connectivity	5	3
17	dhk_rail	point	distance from rail station	quality outside cell	regional service influence				2
18	PO_dist	point	distance from police station	quality outside cell	basic service influence		8. Distance from Urban services	10	2
19	Fire_dist	point	distance from fire station	quality outside cell	basic service influence				3
20	Dstb_dstn	point	distance from dustbin	quality outside cell	basic service influence				1
21	Tel_Dstn	point	distance from telephone post	quality outside cell	basic service influence				1
22	Epole_dstn	point	distance from electric post	quality outside cell	basic service influence				3

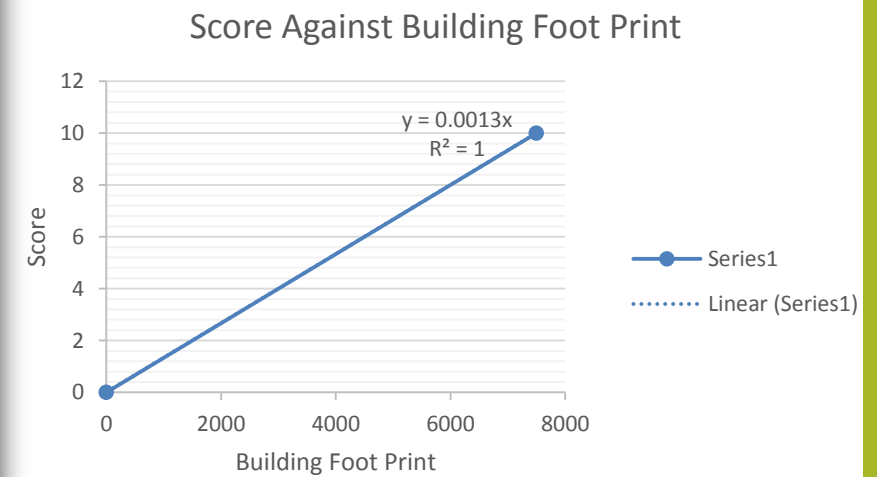
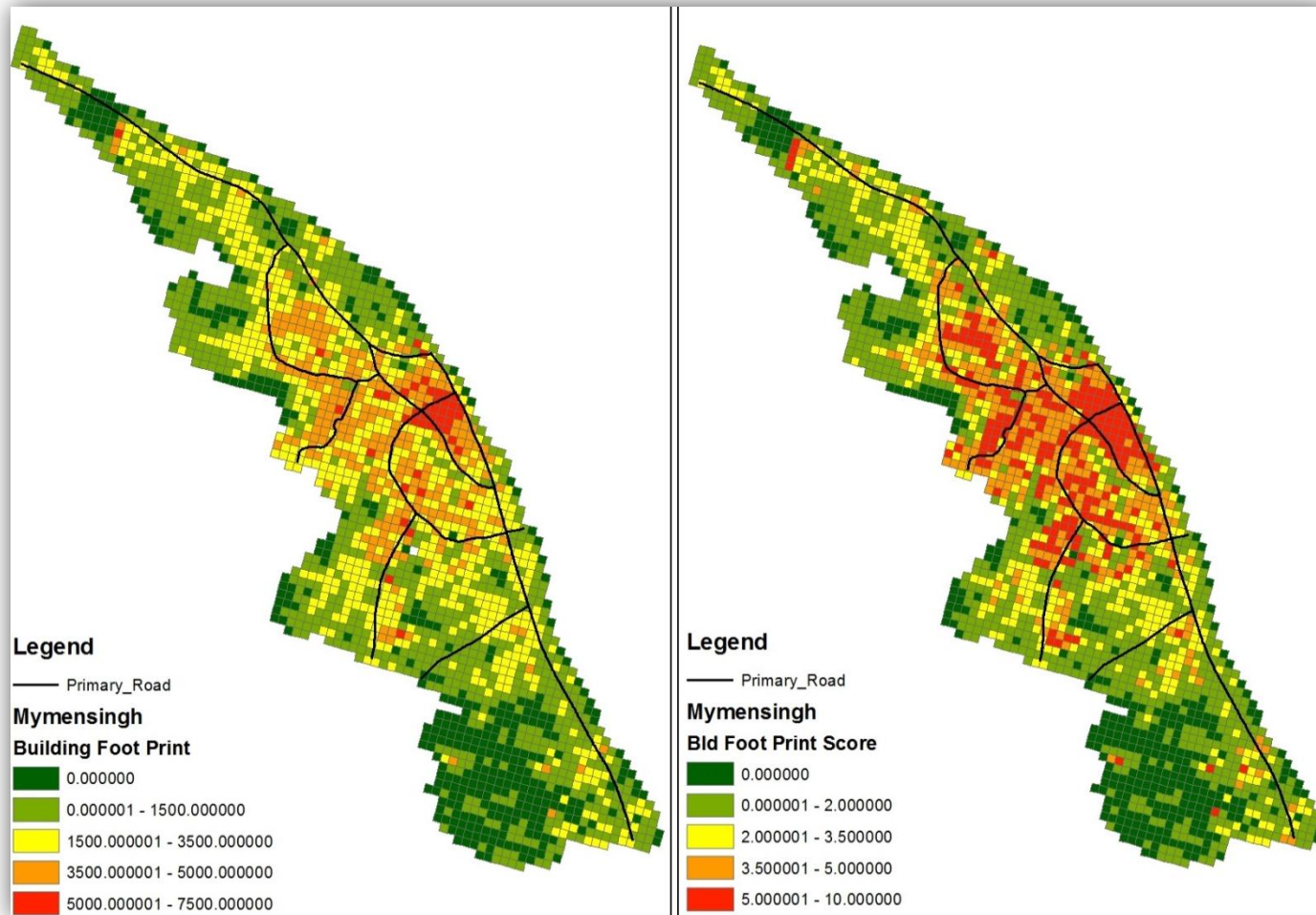
Weightage distribution of the variables for comparative analysis of the cell in mymensingh municipality

S/N	item	quality	description	condition of variable	influence of variable	Load distribution	Broad category	points	detail points
22	Wat_supply	poly	distance from water line	quality outside cell	direct influence within cell	50%	9. quality of direct Urban service	8	2
23	Drn_line	poly	distance from drain	quality outside cell	direct influence within cell				2
24	Rd_Line	poly	distance from nearby road	quality outside cell	direct influence within cell				1
25	RD-width	poly	Adjacent road width	quality within cell	direct influence within cell				3
26	sum_pop_nt	poly	total population	quality within cell	direct influence within cell		10. Quality of inhabitants	5	5
27	Sum_built area	poly	total built up area	quality within cell	direct influence within cell		11. Built-up quality	10	4
28	sum_Build_v	poly	total volumn of that built up area	quality within cell	direct influence within cell				6
29	sum_res_S	poly	total residential area	quality within cell	direct influence within cell		12. Residential	4	4
30	Sum_admin	poly	total administrative area	quality within cell	direct influence within cell		13. Administrative	3	3
31	Sum_Othr	poly	total other area	quality within cell	direct influence within cell		14. Others	5	5
32	sum_edu_sp	poly	total education built area	quality within cell	direct influence within cell		15. Educational	4	4
33	sum_Mixed	poly	total mixed used area	quality within cell	direct influence within cell		16. Mixed used	6	6
34	Avg_ht_rl	poly	avarage height (R.L.)	quality within cell	direct influence within cell		17. Physical quality of cell	5	5

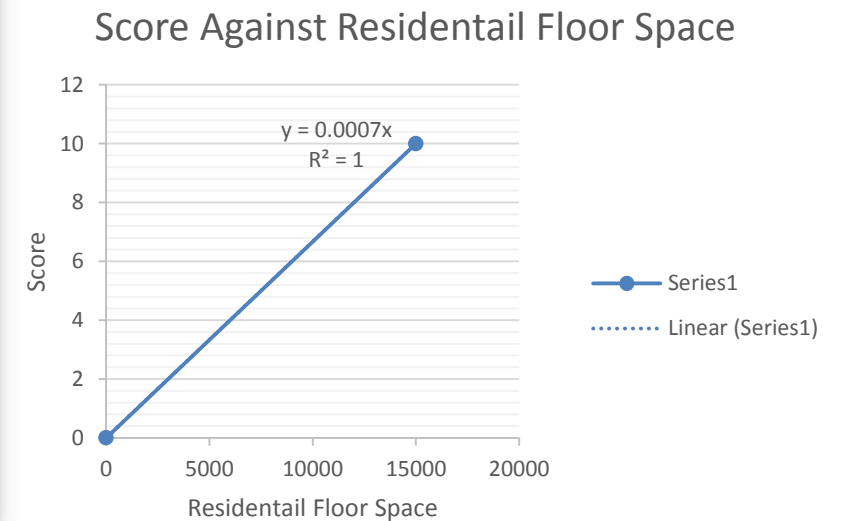
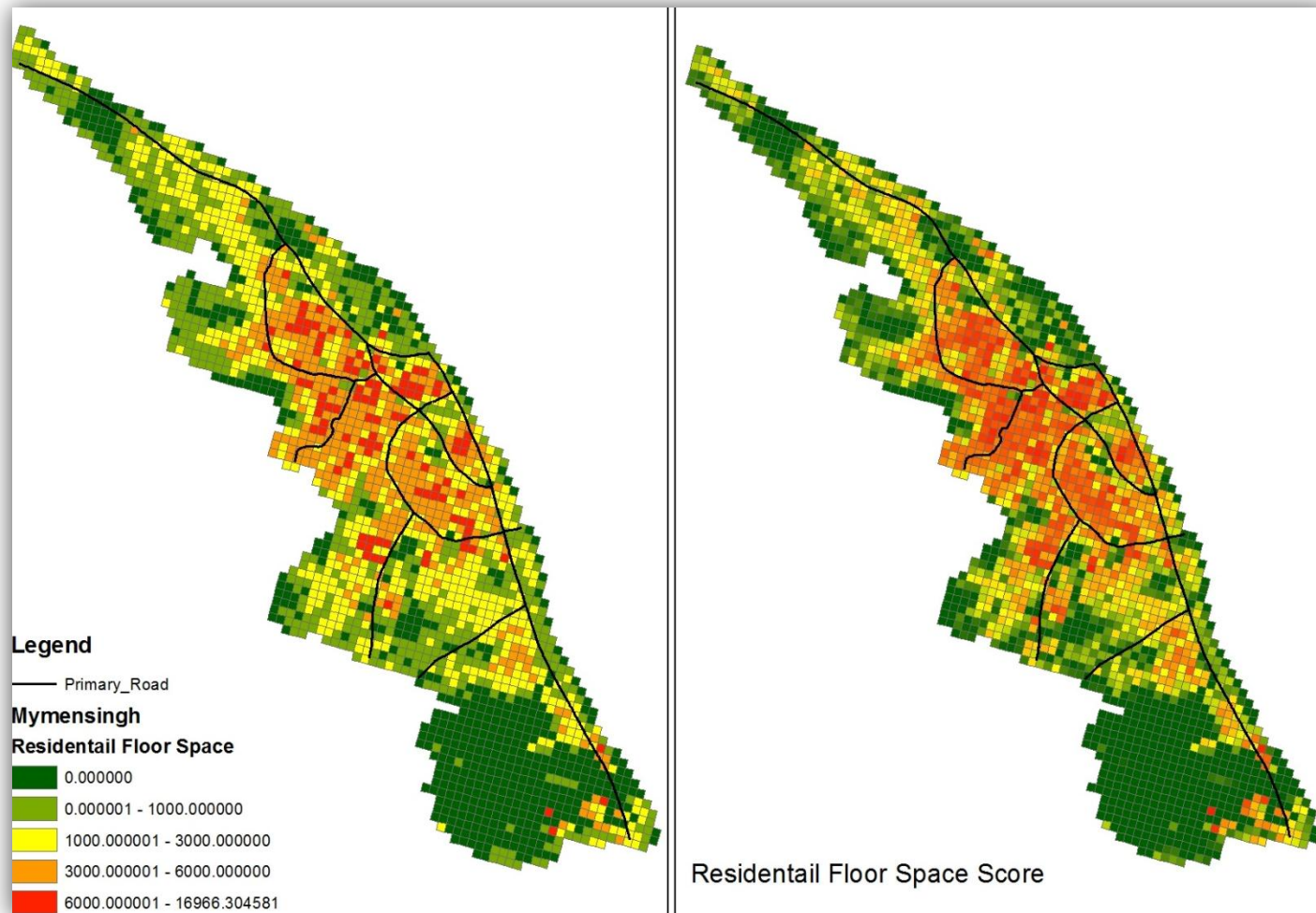
Population Distribution and score of the cell



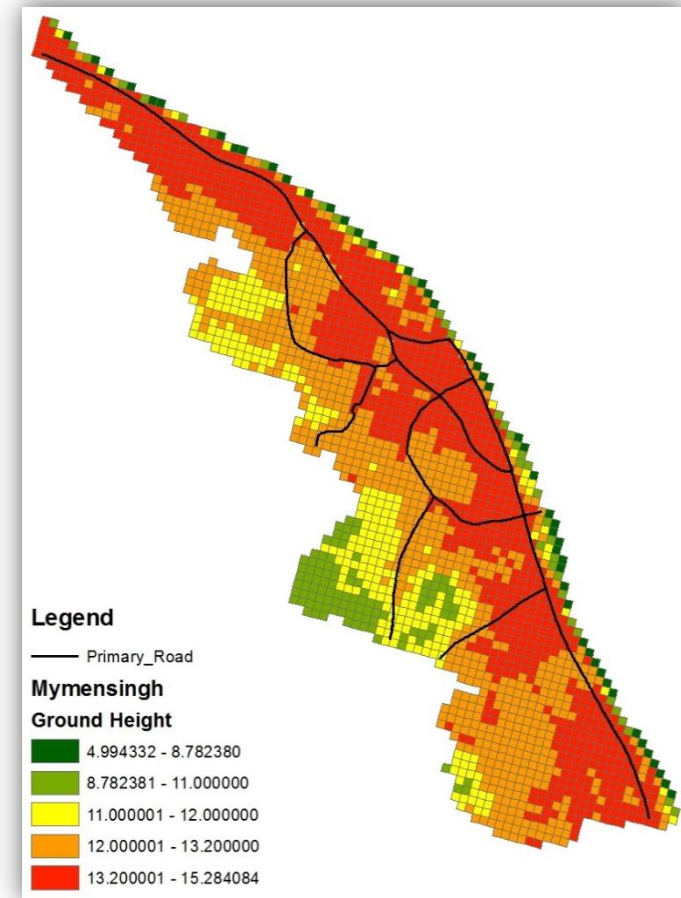
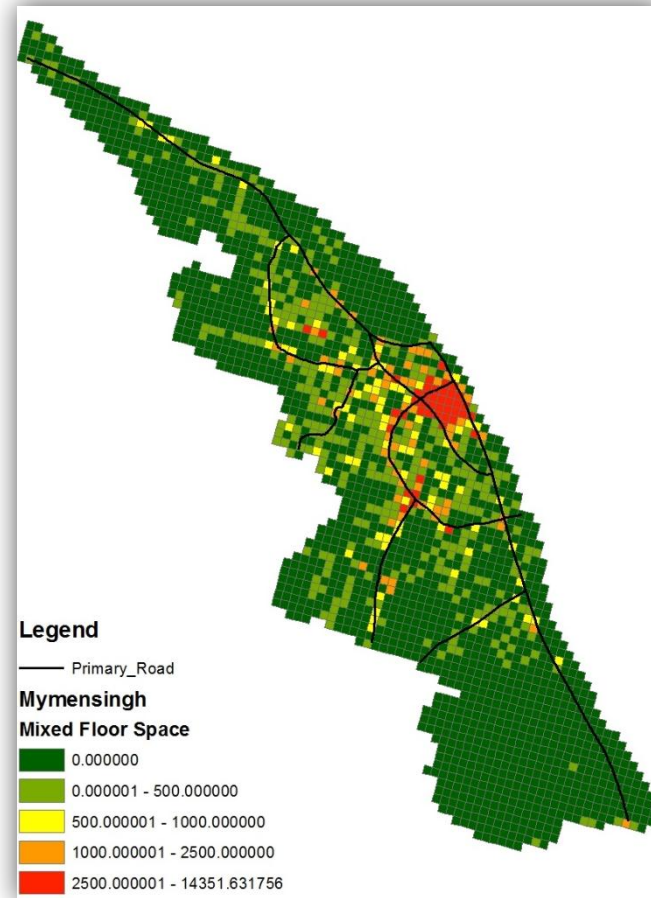
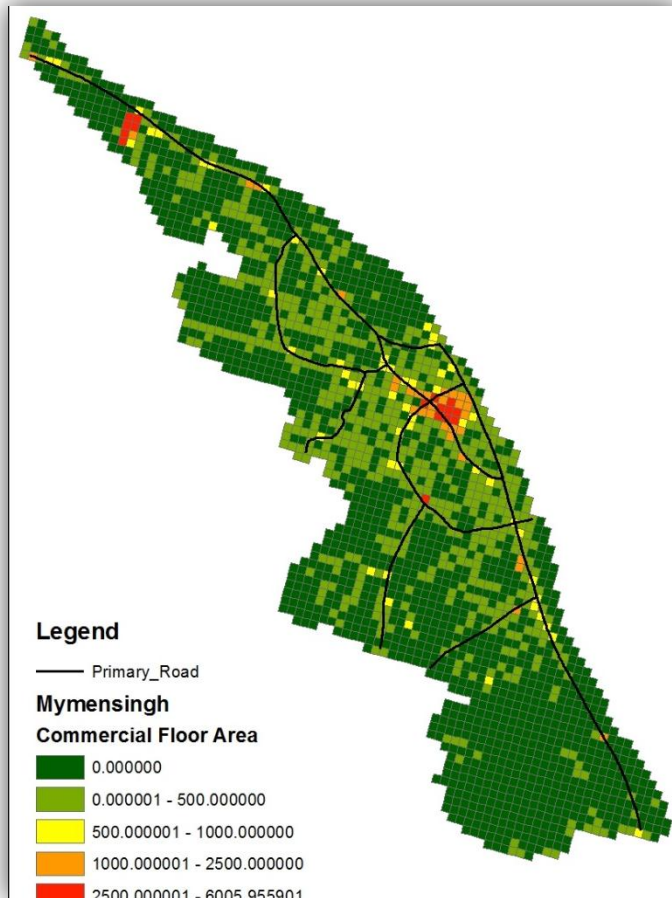
Building foot print pattern & their score



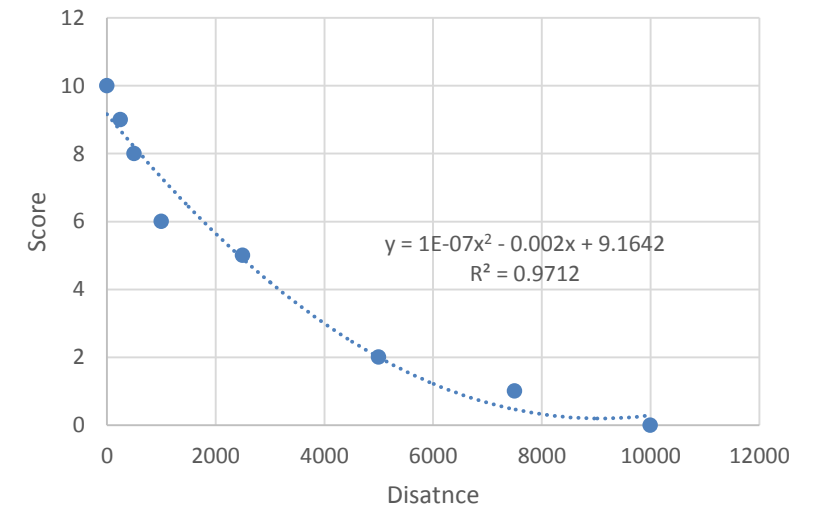
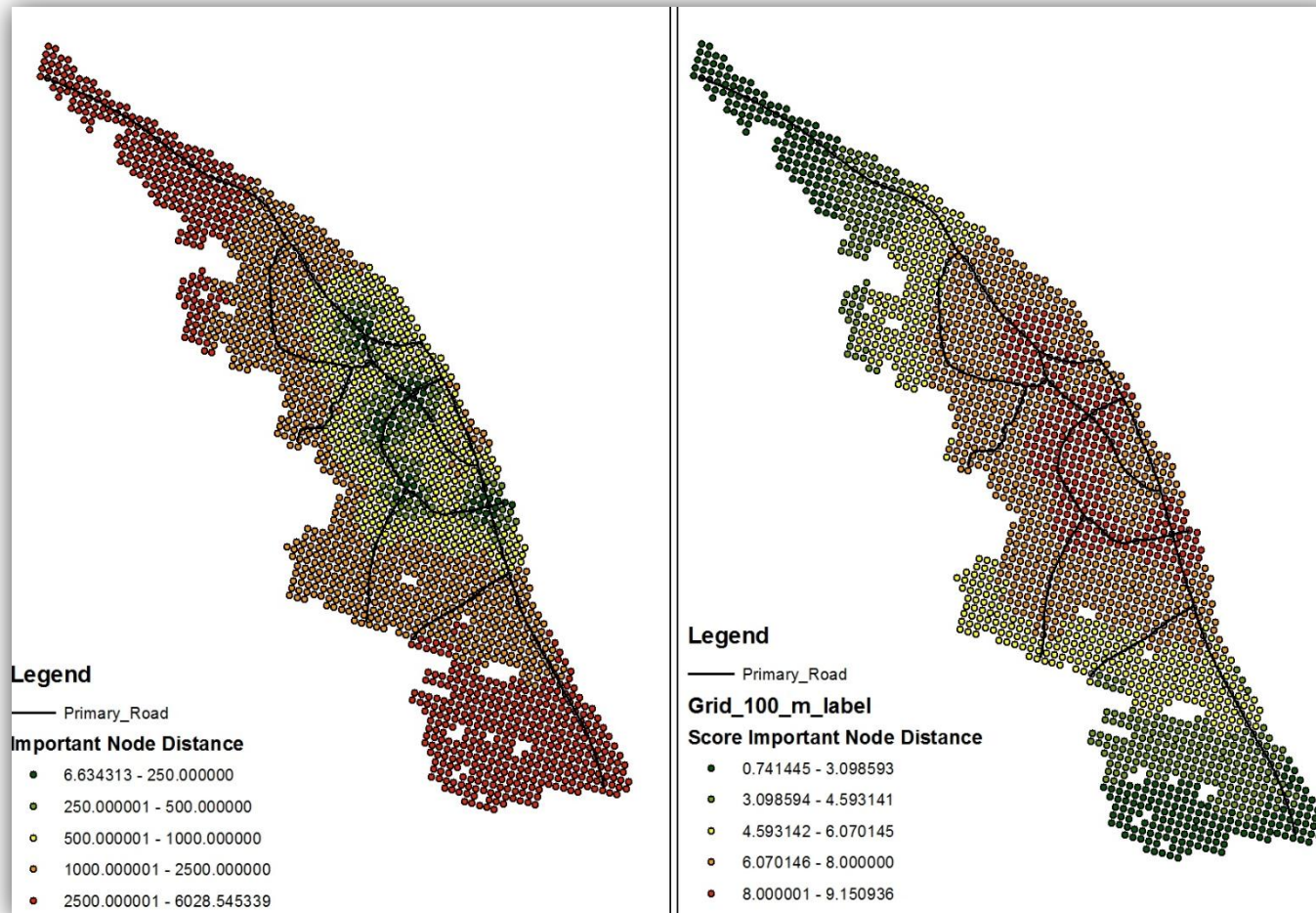
Residential Floor Space distribution and their score



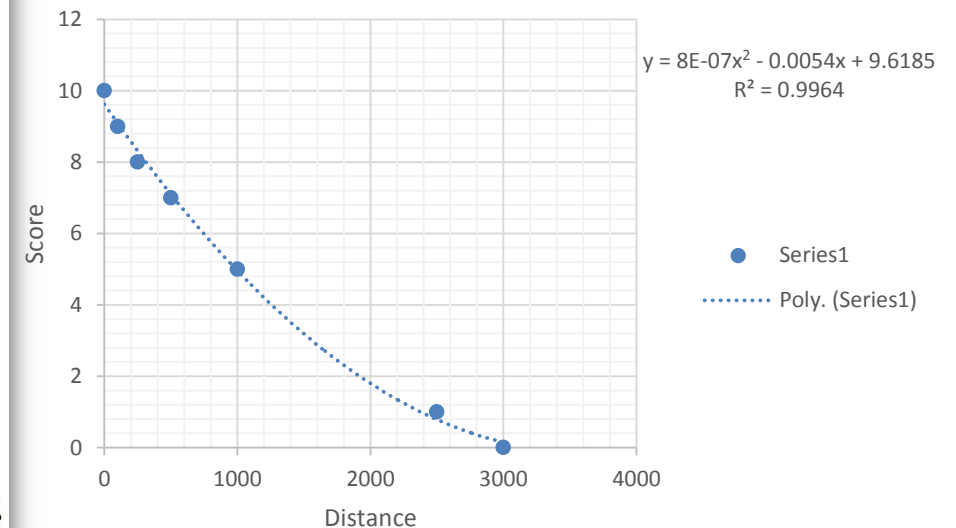
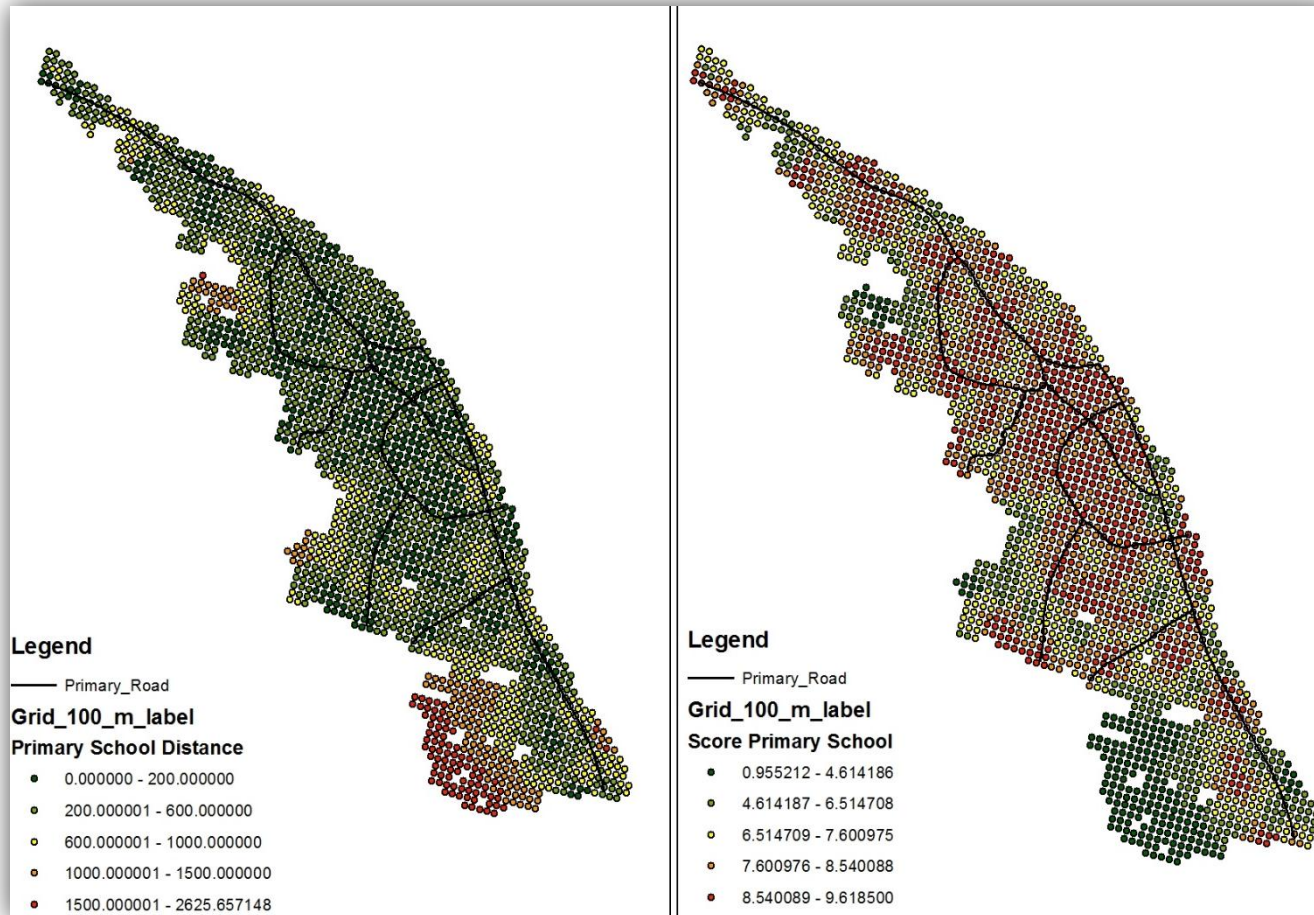
Commercial, Mixed Floor Space and Ground Height Map



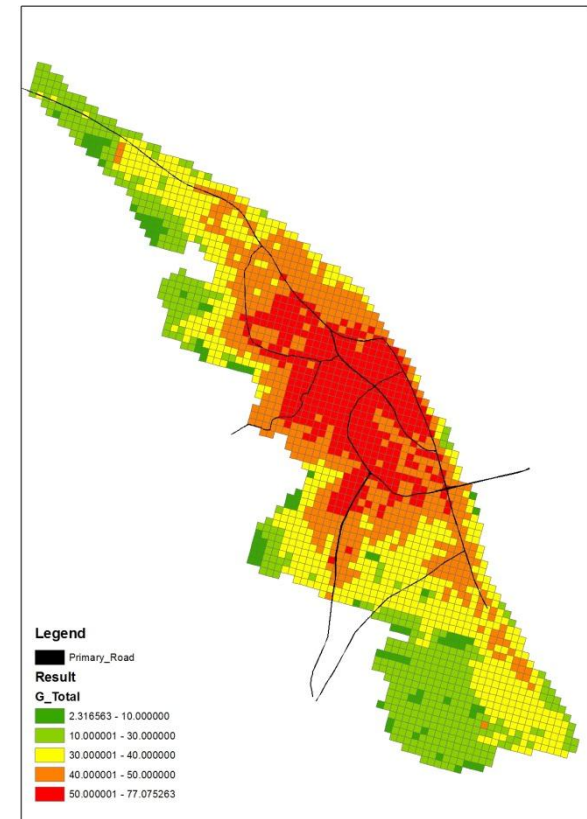
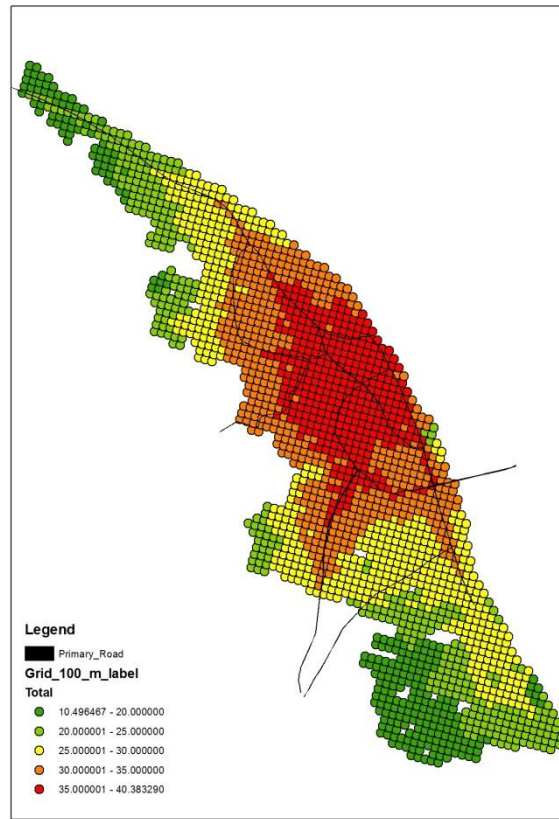
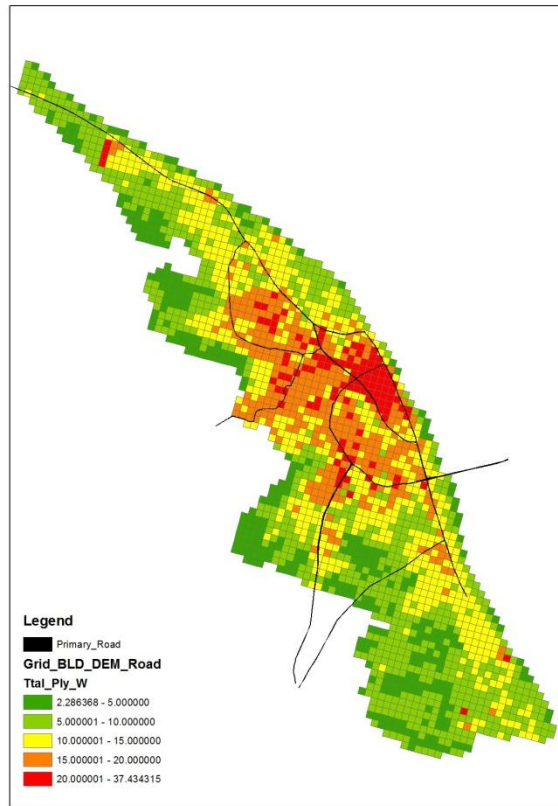
Accessibility of Each cell connected with Important Node and their score



Accessibility of Each cell connected with Primary School and their score



Comparative scenario of Mymensingh Municipality



Thank You

Q & A ???