

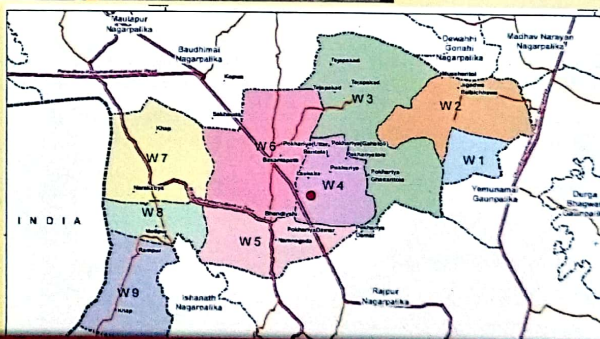


Paroha Municipality
Office of the Municipal Executive
Lankaha, Rautahat
Province No-2, Nepal

Municipality Transport Master Plan(MTMP)
Final Report



Volume- I
Main Report



Submitted By

Bazar Bikas Kendra Pvt. Ltd.
Anamnagar, Kathmandu

Letter of Submission

Paroha Municipality
Office of the Municipal Executive
Province No-2, Rautahat

Final Report

This document is the Final report prepared for the project, "Municipality Transport Master Plan (MTMP)" undertaken by Paroha Municipality, Office of the Municipal Executive, Rautahat. This document has been prepared by Bazar Bikas Kendra Pvt. Ltd. for Paroha Municipality Office of the Municipal Executive, Rautahat. The opinions, findings and conclusions expressed herein are those of the Consultant and do not necessarily reflect those of the Municipality.

Data Sources and Credits

Datasets, drawings and other miscellaneous data are produced/ developed by Bazar Bikas Kendra Pvt. Ltd. for the project during 2019. These data are owned by Paroha Municipality, Office of the Municipal Executive, Rautahat. Authorization from the owner is required for the usage and/or publication of the data in part or whole.



Preface/Acknowledgement

This MTMP Report for Paroha Municipality has been prepared on the basis of Municipality Transport Master Plan Preparation Guidelines and terms of reference prepared by the then Ministry of federal affairs and local development, Infrastructure Development Division, (IDD), Singhadurbar, Kathmandu, November 2014, and as per the ToR provided along with the contract agreement with the Paroha Municipality.

The job was entrusted to the Bazar Bikas Kendra Pvt. Ltd., Anamnagar, and Kathmandu. This report is prepared and submitted as Final report.

The consultants' team would like to express its appreciation to the officials from Paroha Municipality. We are highly grateful for their help and co-operation. We are very grateful to the Chairperson, Vice Chairperson and Chief Administrative Officer and other personnel's of the Municipality and local peoples who directly and indirectly contributed during this study and field survey.

Finally, the project team would like to express thanks to all staffs and colleagues for their anxious support for this study.



Declaration Letter

We hereby declare that we have conducted the study for Municipal Transport Master Plan (RMTMP) of Paroha Municipality professionally using the then MoFALD guideline and other acceptable standard methodologies. To the best of our knowledge, the findings of our study are correct. Municipality Transport Master Plan has been prepared as per standard engineering tools, norms and practices. The visionary city development has been finalized on the basis of the discussion with the stakeholders. We would like to assure you that the RMTMP is reliable, practicable and adequate to the overall development of Municipality transport system. We shall be accountable for any misleading information in any part of this report in respective area of study.

Expert:

1. Team Leader/planner:
Name:
Signature:
Cell Number:
Email:
2. Engineer/socio-economist:
Name:
Signature:
Cell Number:
Email:
3. GIS Expert:
Name:
Signature:
Cell Number:
Email:



Executive Summary

Paroha Municipality is located in Rautahat district, Province No. 2. This Municipality was established merging the then existing 6 VDCs namely Jingadawa(1-9), Tejapakad(1-9), Laukaha (1-9), Basantapatti(1-9), Narkatiya(1-9) and Rampurkhap(1-9). This Municipality now has been divided into 9 wards.

Paroha Municipality has no air transport service to complement the surface transport facilities. Inner mobility and other development activities fully depend on expansion of rural road network within the district. Paroha Municipality has no all-weather transport facilities as most of the municipal roads are earthen.

S N	ROADNAME	Pavement Type (KM)				Total (KM)	ROAD CLASS
		ER	GR	BT	New Track		
1	Bangkul-Narkatiya-Bhediyahi-Namnagada-Rajpur		6.63			6.63	SRN
2	Rautahat Border-Bankul-Kopawa		3.66			3.66	SRN
3	Postal Road		3.94			3.94	SRN
4	Narkatiya-Motipur-Rampur-Khap-Ghuira	4.90				4.90	DR
5	Basantapatti-Inarwari-Pataura	3.30				3.30	DR
6	Basantapatti-Tejapakad	2.92				2.92	DR
7	Sukdev Chowk (BHW)-Jingadiya	2.18				2.18	DR

Study and analysis show that Paroha Municipality has 120 municipal roads. Among those roads some of the roads are included in DRCN. Most of the roads are earthen. Generally earthen roads are in operations only in fair weather.

It is found that the quality of construction of road is very poor and most of the roads have to be upgraded to all weather roads to increase the accessibility of the people and improve the overall transport situation of the municipality.

The first five-year financial plan is prepared based on the assumption that each year budget will increase by 10% from previous year budget. MTPP cost of all road is around 0.875 billion and taking the budget of the current fiscal as the base and increasing the budget yearly by 10%, all road interventions is assumed to be completed in 27 years. The allocation of the budget for road sector in the upcoming five fiscal years with year wise target is tabulated below:



Fiscal Year	Total Budget	Conservation		Improvement		New Construction		Total %
		Amount	%	Amount	%	Amount	%	
2075/76	80467	24140	30	44257	55	12070	15	100
2076/77	88514	26554	30	48683	55	13277	15	100
2077/78	97365	29210	30	53551	55	14605	15	100
2078/79	107102	32130	30	58906	55	16065	15	100
2079/80	117812	35344	30	64796	55	17672	15	100
Total	491259	147378		270192		73689		
%	100	30.0		55.0		15.0		



Acronyms/Abbreviations

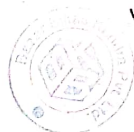
BR	Blacktopped Road
DOLIDAR	Department of Local Infrastructure Development and Agricultural Roads
DTMP	District Transport Master Plan
ER	Earthen Road
GIS	Geographic Information System
GPS	Global Positioning System
GR	Gravelled Road
Ha	Hectare
HH	Household
IDPM	Indicative Development Potential Map
Km.	Kilometre
MIM	Municipality Road Inventory Map
Min.	Minute
MRCC	Municipality Road Coordination Committee
MTMP	Municipality Transport Master Plan
MTTP	Municipality Transport Perspective Plan
NMT	Non- Motorized Transport
NT	New Track
OD	Origin and Destination
PCU	Passenger Car Unit
PT	Public Transport
MTMP	Municipality Transport Master Plan
Sq. km	Square Kilometre
ToR	Terms of Reference
VDC	Village Development Committee



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CHAPTER 1 : Introduction

Municipal Transport Master Plan (MTMP) shall be defined as the process of identification, classification and prioritization of roads within municipality; construction, upgrading, maintenance and rehabilitation of prioritized roads based on approved criteria with calculation of financial budget. The background for preparation of transport master plan along with the objectives and the scope of planning has stated in this chapter. The basic approach for the preparation of MTMP is the bottom up and participatory approach.

1.1 Background

This report on Municipality Transport Master Plan of Paroha Municipality is the outcome of study carried out by Bazar Bikas Kendra Pvt. Ltd. as per the agreement with the Office of Paroha Municipality. This report has been prepared abiding by the Term of Reference developed by the Office of Paroha Municipality based on the MTMP preparation norms and standards. This report has been prepared with intensive field visit of Urban/Transport planner, Civil Engineer, Social mobilizers, Enumerators and other professionals.

Nepal having least developed rural countryside communities, rural development is one of the main agendas for the overall development of the nation. The ultimate goal of rural development is attainment of sustainable livelihood and improved well-being of rural people. In the absence of better access to the goods and services; the people suffer. Rural people's needs for sustainable livelihood and improved well-being are possible only when they have better access to information, markets and opportunities; they need better access to health, education and other goods and services. The MTMP is designed to take account of the real needs of the rural population for easy access to infrastructure.

Integrated Rural Accessibility Planning (IRAP) could be an effective tool to assess the existing situation of the services and facilities in rural areas. The access situation of the services and facilities including the infrastructure for each settlement will indicate the interventions to improve the access situation. The interventions derived from the Integrated Rural Accessibility Planning will represent the real needs and priorities of the local people. The planning approach should be participatory and Bottom-up, Demand Driven Approach from the settlement level. The implementations of such projects will certainly be more participatory and owned by the local communities. That makes the plan and project sustainable in the long run.



Local Governance Operation Act. 2074 has provisioned the local bodies for preparing and implementing the local level plans which includes the process of identifying, prioritizing and developing various sectorial plans and programs based on needs of the local units. Accordingly, the act has provisioned to formulate the periodic plan of the district with the visions, mission and strategy of the district vis-à-vis integrated plan of the various sectors and sub sector agencies. Municipality Transport Master Plan (MTMP) is infrastructure development plan of the local bodies to identify the road interventions. This plan contains the perspective plan of municipal road and ranks the municipal roads so that the proper investment can be planned.

Municipality Transport Perspective Plan (MTPP) is a long-term transport plan of feasible rural linkages based on the socio-economic, geo-physical structure, development potentialities, as well as accessibility conditions of the district. The Rural Roads linkages are scored, graded and classified based on the Approach Manual prepared by for the DoLIDAR and the MTMP guideline prepared by the then MoFALD. A total road network is prepared to provide transport access to the settlements within the national standard of minimum hour to reach the all-weather roads.

1.2 Objective of MTMP

The overall objective of the consulting services is to prepare the Municipality Transport Master Plan (MTMP) of the Paroha Municipality. The specific objectives are:

- Finalize visionary city development plan if Comprehensive Town development plan is not prepared
- Analyze the accessibility situation.
- Identify and priorities the interventions based on the accessibility situation
- Prepare Indicative Developmental Potential Map (IDPM)
- Prepare the Municipality Inventory Map (MIM) of Road networks.
- Collection of demands for new/rehabilitation transport linkages from Municipalities / Settlements based on city development plan.
- Prepare the Perspective Plan of transport services and facilities;
- Synchronies the Final Perspective Plans of adjoining VDCs/Municipalities/districts
- Develop scoring criteria and its approval from Municipality.
- Prepare the five-year Municipality Transport Master Plan (MTMP)



- Prepare a realistic physical and financial implementation plan of prioritized roads for the MTMP period; and
- Prepare Municipal Transport Perspective Plan (MTPP)

1.3 Scope and Limitation of MTMP

The scope of works and services of the consultant for the project are given below:

- Assist for the formation of the Municipality roads coordination committee (MRCC)
- Secondary sources of information and review of the existing MTMP (if any)
- Accessibility data collection and analysis
- Prepare the Indicative Municipality Development Potential Map (IDPM)
- Prepare the Municipality Inventory Map (MIM) of Urban Road, Main Trails and Bridges
- Collection of Demands for New/Upgrading/Rehabilitation Transport Linkages from Wards/Settlements
- Developing Scoring Criteria and its Approval from Municipality
- Road Classification and Nomenclature
- Preparation of Perspective Plan of Interventions of Services and Facilities
- Analyze Fund Availability for Roads
- Preparation of the Municipality Transport Master Plan (MTMP)
- Prepare a Realistic Physical and Financial Implementation Plan of Prioritized Roads for the MTMP Period

1.4 Approach and Methodology

Municipal Transport Master Plan is prepared using participatory bottom-up approach from the settlement level. Techno-Political interface is incorporated in the planning process, where active participation from representatives of Chief of Municipality, Ward Member, political parties, line agencies, municipality officials is crucial. The Municipality Road Coordination Committee (MRCC) is constituted as an authorized legislative body of municipality.

1.4.1 General Approach

The Consultant has gone through the objective and ToR for Consultancy Services for preparation of the Municipal Transport Master Plan (MTMP). The ToR was itself sufficient for the execution of the work.



Integrated Rural Accessibility Planning (IRAP) is an integrated approach to solving problems by combining transport as well as non-transport interventions. It is participatory and bottom-up approach. Active involvement of community people and local authorities in every step is essential. The consultant facilitated the community people and local authorities in their need's identification, project prioritization and visionary development planning process.

The accessibility is function of distance and traveling time, frequency of travel, transport infrastructure difficulty factor, physical facilities of Socially Oriented and Responsibility (SOR), and management of SOR provision and viability of service provision. The degree of accessibility problem was assessed in terms of accessibility index of the settlements to concerned SOR sector. Accessibility Indicator is measurement of accessibility.

The required interventions shall be identified for improving accessibility of every settlements based on easing and reducing travel time, improving physical facilities for SOR and improving management of SOR provision in an integrated fashion.

1.4.2 Methodology

The methodology comprises with the Integrated Rural Accessibility Planning (IRAP) tools for the accessibility planning and DoLIDAR's Approach Manual for the roads and the MTMP Preparation Guidelines for the preparation of the MTMP with some modification as per Municipality situation and based on the ToR provided by the Municipality and as directed by the project in-charge of the client.

The Consultant's efforts were comprehensively streamlined to meet the objectives of the assignment by covering scope of services outlined in the prescribed Terms of Reference. The consultant has followed the following specific process to accomplish the assignment as specified in the objectives and scopes of work in the TOR.

Table 1: Methodology to be Involved during MTMP Preparation

SN	List of Task	Activities	Outputs
1	Data Collection		
1.1	Review of secondary source of information	Collection of secondary information/Maps from the various agencies, I/NGOs and other regional and central level related institutions.	Obtain information about Municipality situation in general, ready to proceed further steps.
	Review of existing MTMP	Review of available existing MTMP if any Data collection about year wise budgeting for MTMP road and progress report of Municipality Interaction with Municipality technician and other officials	Trend of implementation of MTMP planning , constraint of implementation will be found out



1.2	Accessibility data collection	Through enumerators/field supervisor: Verification of secondary data in the field. Collection of road data using GPS Collection of access situation of every settlement in prescribed format.	Find out the access situation of every settlement , identification of gaps with the reference to Comprehensive City Development Plan
2	Analysis of Data	Data entry -storage of collected data in computer using MS Excel software. Base map preparation Calculation of accessibility index	Compilation of data, accessibility index of all wards of the Municipality
3	IDPM preparation	Assess the various potentiality of development of the Municipality Organized Municipality/MRCC meeting GIS map preparation	IDPM report, Finalization of Growth Centers, identification and ranking of existing/potential areas and services
4	MIM preparation	Assess the inventory of existing transportation linkage Reconnaissance survey Identification of required intervention Map preparation	MIM report, identify the existing transport situation, verification of MIM through discussion with the Municipality
5	Area workshop Ward	Participatory workshop in each wards Discussion about criteria of prioritization. Standardize the accessibility indicator Synchronize of interventions at Municipality level Validation of access data Prioritization of interventions.	Prioritization of interventions and projects.
6	Perspective Plan	Compile the result from o Accessibility analysis. o Area workshops Identify and prioritize the interventions in every services and facilities based on approved Municipality standard. Extract required interventions in transport linkage from the perspective plan of services and facilities	Perspective Plan of service and facilities including Municipality road network
7	MTMP Preparation	Assess the financial resources Priorities the perspective plan Preparation or updating MTMP	First five year Municipality road planning
8	Approval of MTMP	Presentation of Final MTMP on Municipality council through MRCC and Municipality meetings.	Final MTMP report

Task 1 Data Collection

a) Collection and Review of Secondary Information

The information about demographic data of Municipality, maps, service flow pattern, various maps showing service centers or transport infrastructure inventory, past plans and sectoral study reports, sectoral standards and policy targets were collected from the secondary sources like DoLIDAR, Municipality, other related agencies, Central Bureau of Statistics, Kathmandu, Topographical Survey Branch, Local NGOs. The details are given below:

List of documents/information collected and reviewed

- Previous reports of MTMP prepared by the Rural Municipalities (if any)
- MTMP of neighbouring Municipality (if available).
- District/Municipality periodic plan prepared by the DDC/Municipality
- Annual reports /publications of line agencies of Municipality
- District/Municipality profile of the DDC/Municipality
- Traffic data of the Municipality rural roads and strategic roads (if available)
- Annual plan, Programme and Budgetary allocations of last 5 years
- Expenditure in infrastructure development including roads in last 5 years
- Report on settlement pattern and market centers of the Municipality
- Rural road statistics of neighbouring Municipalities and strategic road Networks
- Financial and technical Data of ongoing rural road projects in the Municipalities and schedule including bilateral and multilateral funded projects.
- Demographic Statistics and socio-economic feature of the Municipality
- Other relevant reports

Collection of Maps

- Topo maps the 1:25000 scales, which will be used as base map.
- Municipality administrative map of Municipality
- Arial photographs
- Municipality Trail Map
- Map of strategic road Networks of Nepal
- Other Thematic maps

The main agencies for sources of information are

- District Development Committees (DDC),
- Municipality



- Line agencies/office of the district about road, Municipality, Soil Conservation office, Forest, Agriculture Development, Livestock Service, Irrigation, Health, Education, Water Supply and sanitation, cottage industries, etc.
- National or municipal Research Organizations,
- Local and national NGO and INGO's working in development fields,
- National Bureau of Statistics.
- Department of survey
- Other relevant office

The secondary information collected from above mentioned sources has been critically reviewed. The data were verified by and cross checking of information of various sources and discussion with informants and local community people at unofficial and official meetings, workshops on the process of primary data collection.

b) Primary Data collection

Primary information on present household and trip characteristics, traffic characteristics, existing accessibility and mobility level of settlements, prioritized road network required for each wards has been obtained via various reliable methods. Tracking of the existing road network along with detail information of its width, surface type and possible intervention required for the effectiveness of services is also carried out.

The primary data collection methods carried out in the field were:

- Origin and Destination (OD) Survey
- Road Inventory Survey
- Demand Survey
- Classified Vehicle Count Survey
- Public Transport and Services Study

Questionnaire method has been used to conduct *Origin and destination survey* which gave number of information reflecting, personal, household and trip making characteristics. This survey has also helped to visualize the accessibility and mobility scenario of road network and to public transportation from the settlement/wards. As all the household can't be covered a realistic and statistically significant sample size was calculated based on probabilistic method.

Road inventory survey was conducted to collect data on its condition of road, road linkage, road safety status and issues that need to be highlight. It helped in field validation of base maps and assisted in the preparation of road inventory map, nomenclature and coding of the road linkages and proposed various interventions.

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Road Demand survey comprised of interaction session with the members of *wards* followed by ward level workshop to fill up demand survey form, which included demand of new facility or interventions to improve existing roads based on priority.

Classified vehicle count was conducted to reflect the usage of various vehicles in the certain route, especially where maximum volume occurs. Twelve hour count has been done at required location and the vehicles have been classified to different types and finally traffic volume have been converted to passenger car unit (PCU) to visualize the exact condition.

Public Transport and Services Study highlighted the services provided by public transportation and location of various services and facilities. It was carried out by directly interviewing the route operators.

c) Municipality IRAP and MTMP Orientation

One-day orientation program has been carried out in the Municipality for the IRAP and MTMP preparation. The participants were Municipality body, line agencies, stakeholders, and representatives of national political parties and representatives from women, Dalit, local NGO. The field visit of enumerators has been arranged to:

- Verify the secondary data in the field.
- Collect data of access situation of every settlement in prescribed format.

Task 2 Analysis of Data

Compilation of data/Information collected from primary and secondary sources has been done by storing the data on computer. The data was entered in spreadsheet and prepare accessibility tables calculating the accessibility indicator approved by Municipality.

The analysis has been done on the basis of time and quality factors. Accessibility Maps of every SOR facilities has been prepared. Accessibility profiles and accessibility maps of various SOR sector at settlement level was prepared and compiled them at ward level.

Task 3 Indicative Development Potential Map (IDPM) preparation

The development potential of the Municipality in agriculture, horticulture, livestock, cottage and small industries, other potentiality of the Municipality has been compiled and prepared on the base map 1:25000 scale.

a) Municipality base map has been prepared showing:

- Administrative/political boundaries of Municipality/Ward.
- Large settlement
- National strategic roads, Municipality roads, rural roads, trails, bridges.
- Important historical, cultural, religious and preserved places
- Important water bodies, forest and other lands.



- b) The Consultant has analyzed the potentiality of the Municipality from secondary information collected from Municipality. The development potential area has been defined as:
- Areas with extensive agriculture,
 - Areas with extensive horticulture,
 - Areas with extensive Livestock farming,
 - Areas with extensive fisheries,
 - Areas with extensive high value cash crops,
 - Areas with extensive business markets,
 - Potential Areas with tourism development,
 - Potential Areas with development of large industries like hydropower, mining develop,
 - Potential service centre
 - And other potential development areas
- c) Plotting of the development potential areas on the Municipality base map has been done and the finalized map was prepared on GIS.

Task 4 Preparation of MIM

The consultant has plotted the trail, bridge and road network of the Municipality in 1:25000 and GIS maps from Municipality level secondary sources. The consultant then carry out reconnaissance survey in the trails, bridges and roads with the help of checklist and update the map. The consultant has also prepared indicative cost estimates of improvements (Routine maintenance, recurrent maintenance & upgrading) and new construction of representative trails, bridges and road in the Municipality. The consultant has prepared a support document of MIM and validates the MIM and the document in MRCC.

The consultant has prepared list of all existing transport linkage under the category of routing maintenance, recurrent maintenance, periodic maintenance and upgrading. These lists have been prepared separately for various classes of roads. The consultant then prepared indicative cost estimate for improvement.

On the basis of linkage inventory and condition of the linkage, easy linkage has been subdivided into maximum four types of section i.e.

- Section requiring routine maintenance
- Section requiring periodic maintenance
- Section requiring rehabilitation
- Unordered section (new construction)



All roads have been plotted under separate legends category by intervention type in MIM. List of roads having graveled road street cars has been prepared separately. Information regarding inter municipality road /trails also be included and used drawing planning process.

Task 5 Perspective Plan

The required of interventions of services and facilities has been identified from the accessibility analysis and compilation of ward level workshops. During the final Municipality level workshop, the Municipality standard of time and quality accessibility for every service and facilities has been decided. The required intervention of every services and facilities has been identified and finalized on workshop on the basis of accessibility indicator. The Prioritized sector of services and prioritization of wards for every sector was done at Municipality level.

In transportation sector, list of roads, bridges and required interventions for respective roads and bridges has been identified to improve accessibility to goods and services within the Municipality. The perspective plan of Municipality road has been prepared for 20-25 years. All the identified interventions screened and graded on the basis of criteria 'B' of the approach manual. The interventions of services and facilities for the improvement of the access situation was discussed first with the Municipality technical team and the MRCC, and only upon their recommendation it was forwarded to Municipality council meetings, hence the final perspective plan of Municipality roads has been developed. The perspective plan has been shown in GIS maps also.

Task 6 MTMP Preparation

Considering the Perspective Plan, the prioritization of the Perspective Plan has been done according to the DoLIDAR Approach Manual. Subsequently, the updated five year MTMP of the Municipality was prepared by selecting interventions (maintenance, upgrading and new construction of main trails, trail bridges and roads) that have top priority in the Perspective Plan and that could be implemented in the next five years period, based on cost estimates of maintenance, upgrading, rehabilitation and new construction of main trails, trail bridges and roads and available financial resources.

1.4.3 Desk Study

Project Sensitization to Team

After signing the contract, the consultant has arranged a meeting of the proposed team and orient towards the objectives and scope of the work along with the working and manning schedules so that all the personnel will work as a team. The consultant has proposed a study team consisting of Transport Planner as a Team Leader, Socio-economist, who are competent and established professionals in their field of work. The study team was mobilized for further study.



1.4.4 Process and Activities in detail methodology

The Consultant has listed out all transport linkages given in the Perspective Plan, under the following categories;

- a. New construction
 - b. Upgrading
 - c. Rehabilitation
 - d. Recurrent maintenance
 - e. Periodic maintenance
- These lists have been prepared separately for various road classes (Road Class A, B, C, D)
 - On the basis of Criteria (for prioritization), the consultant has ranked all the above projects
 - The financial resources of Municipality on road sector has been analysed first
 - The Consultant has prepared next Five Year's Projected Financial Plan by accounting all possible financial resources of Municipality and concerned wards.
 - The consultant has prepared Five Year Financial Plan of the Municipality based on likely availability of financial resources in next five year. (All consolidated financial resource has been projected based on the past 2- 3 years data.
 - The Consultant will determine the tentative lengths that could be under taken by each year, in each category and under each class. These lengths shall be documented and presented.
 - The Consultant has prepared all ranked lists of transport linkages to the Municipality for the selection of year - wise priority lists which should be implemented in the first, second and fifth year.
 - All ranked lists of transport linkages; the Consultant has selected the year-wise priority lists to be included in the "*Five Year Master Plan*".
 - Based on the approved year-wise priority lists, the Consultant has prepared Five Year Municipal Road Master Plan.
 - The Final report of MTMP was presented on Municipality and MRCC in a workshop. Incorporating the suggestions and recommendations from the Municipality and MRCC, the final report has been prepared. Subsequently, the Municipality will present the final MTMP report to the Municipality council for formal approval

1.4.5 Organization of Workshop

Following workshops were organized.

1) Municipality IRAP and MTMP Orientation

One day orientation program was carried out in the Municipality for the IRAP and MTMP preparation. The participants were Municipality bodies, line agencies, stakeholders, representatives of national political parties and representatives from women, Dalit, local NGO.

2) IRAP Data collection training

One day orientation training for enumerators was organized for them about efficient data collection using IRAP tools at the consultant's office.

3) Ward/cluster level workshop

The consultant has organized ward/ cluster level workshop in each ward in which ward members, ward secretaries, representatives of political parties, women, NGO's, disadvantaged peoples representations, davits, traders, industries were presented. The workshop primarily focused on following aspects.

- Access situation within the area
- Validation of accessibility data
- Identification of interventions of every services and facilities.
- Access situation within the area
- Assess the local prioritization

4) Final workshop at Municipality level

The final validation workshop at Municipality level was organized at Municipality. The workshop primarily focused on following aspects:

Verification and update of secondary information and data's

Finalizing IDPM, MIM, Accessibility profiles.

Standardize accessibility indicator.

Finalization of intervention required and prioritized at Municipality level.

Identifying new viable transportation linkages and standard.

Problem identification in the rural transport linkage and required intervention on this.

Identifying required intervention (i.e. routine maintenance, periodic maintenance, rehabilitation and upgrading length) for each transportation linkages and bridges.

Responsibility of ward and Municipality regarding maintenance, rehabilitation and upgrading works.

Financial recourse mobilization for the achievement of the set target.



CHAPTER 2 : Review of Existing Infrastructure Situation

Before going through Municipal Transport Master Planning (MTMP), it is fundamental to know about the present condition transport infrastructure. This chapter includes the existing road and roadside infrastructure along with their current condition. The physical infrastructure which has indirect effect to the transportation system such as urbanization, apartment system has also been assessed.

The existing transportation network of Paroha Municipality was studied during this inventory survey. Condition of various structures of roads was also studied. Most of the roads were found to be fair weather road. All roads and cross drainage structures requires proper regular maintenance in order to keep them in full functioning state. It is required to upgrade all existing roads to all weather roads.

2.1 Assessment of Existing Infrastructure Situation

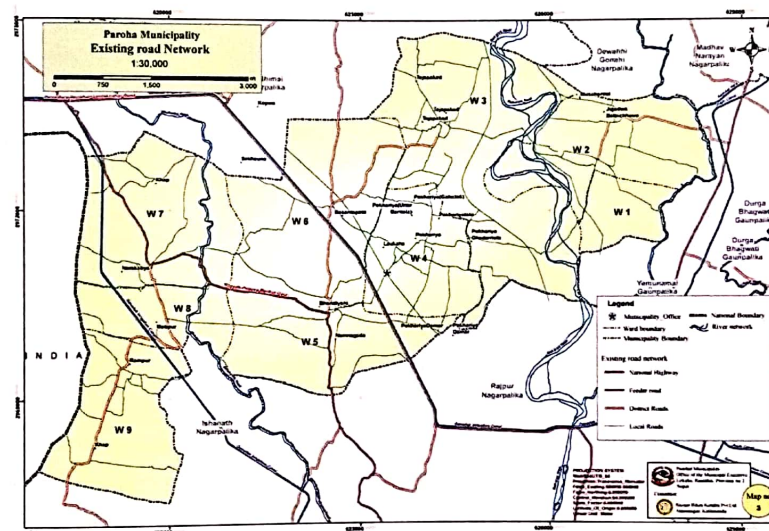


Figure 1 District Road Core Network Road Network of Municipality

Paroha Municipality has no direct link with the national highway but it has two feeder roads and a postal road within its municipal boundary. The one of the feeder road, F205: Bangkul-Narkatiya-bhediya-Namnagada-Rajpur road passes through ward no 7, 8 and 5 and connects

this municipality with Budhimai Municipality and Ishannath Municipality. The other feeder road F207: Rautahat Border-Bankul passes through ward no 6, 4, and 5 and connects this municipality with Budhimai Municipality and Ishannath Municipality. The postal road H17 also passes through ward no 6, 4, and 5. Similarly there are 4 district roads within the municipal boundary of this municipality. The Narkatiya-motipur-rampur-khap-ghuira road passes through ward no. 7, 8, 9. The Basantapatti-Inarwari road passes through ward 6. The Basantapatti-Tejapakad road passes through ward 6,3and the Sukdev Chowk- Jingaswa road passes through ward no 2. Most of the district are found to be earthen while the feeder roads are found to be gravelled.

Table 2: List of Non Municipal Roads in Municipality

S. N.	ROADNAME	Pavement Type(KM)				Total (KM)	ROAD CLASS
		ER	GR	BT	New Track		
1	Bangkul-Narkatiya-Bhediyahi-Namnagada-Rajpur		6.63			6.63	SRN
2	Rautahat Border-Bankul		3.66			3.66	SRN
3	Postal Road		3.94			3.94	SRN
4	Narkatiya-Motipur-Rampur-Khap-Ghuira	4.90				4.90	District Road
5	Basantapatti-Inarwari	3.30				3.30	District Road
6	Basantapatti-Tejapakad	2.92				2.92	District Road
7	Sukdev Chowk (BHW)-Jingaswa	2.18				2.18	District Road

2.2 Visionary City Development Plan

The definition of visionary is someone or something that thinks about the future or advancements in a creative and imaginative way. A person who is ahead of his time and who has a powerful plan for change in the future is an example of a visionary.

Municipal Development Plan includes the vision for land use and development over next five years. This master plan outlines the goals and objectives for the future and is the principal guide directing land use policy and decision making. It will help in growth of city and provides a reliable basis for public and private investment. This plan will present a vision for land use and development in coming years.

For the successful implementation of this plan following steps are to be included:

- Revision of municipal ordinances and bylaws in order to ensure the proper reflection of plan's goal and policies

- Development of a capital budget and program to outline long term public investments need and commitments
- To offer detail about the various area of the Municipality
- Continuing community involvement in the planning and governing

The main vision of this Municipality for the planning shall be outlined as:

"सुचना प्रविधिमैत्री एवं सबल स्थानिय सरकार !

पुर्वाधार निर्माण, कृषि, पर्यटन र सशक्तिकरण परोहाको आधार"!!

Guiding principal of this vision;

- ❖ Sustainable development of the city
- ❖ Advancement in information and technology
- ❖ Infrastructure development
- ❖ Preservation of the cultural and religious monuments
- ❖ Qualitative economic development
- ❖ Encouraging the local people for the better accessibility in the services and facilities
- ❖ Encouraging the peoples participation in the development process
- ❖ Encouraging the disadvantaged and backwards peoples

Lead sector:

- ❖ The lead sector of this Municipality for the overall development is the urban agriculture and to establish industries based on those agricultural products. The rural urban linkage is of the prime importance of the development sector. To promote this lead sector in this Municipality government should focus on the micro financing and cooperatives in the community level in the agriculture. Beside this village tourism may also be another sector for the overall upliftment of the economic sector in this Municipality.

Plan of various sectors should be included in the municipal plan

A. Land use Plan

- Various settlements will be linked to each other via a network of greens places, public transit
- Everyday services such as markets, medicines etc will be concentrated in higher density settlements
- Religious, educational and medical institutions will have respected place in the community



- There will be protection of natural areas from harmful and incompatible development and maintain the integrity of natural systems
- There will be support to the development of relationship between agriculture and industries

In this regard, this Municipality has the following type of existing land- use situation (refer land-use map). For further planning this Municipality should think for the probable settlement extension area.

Figure 2 Existing Land-use Map

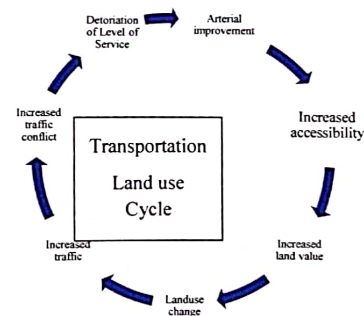
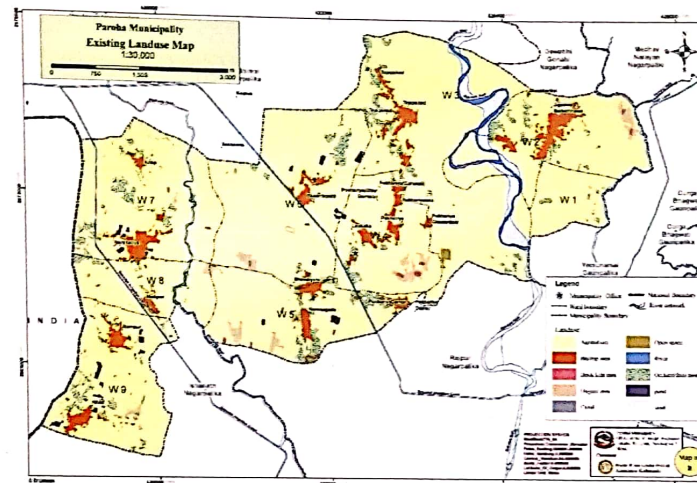


Figure 3 Transportation land use cycle

B. Natural environment

- Will work toward relationship with the natural environment
- Protection of natural resources from degradation
- Will preserve scenic viewpoints and insure public access to natural areas where appropriate

C. Transportation Plan

- Will offers a range of choices that are safe, affordable and convenient for residents
- Will use the roadway as efficiency as possible

D. Community facilities and services plan

- Will make the most effective and efficient use of existing services, buildings, utilities and facilities
- Will coordinate land use and development with the availability and capacity of public services, facilities and utilities
- Will concentrate city administrative functions and public services to the greatest extent possible
- Will ensure that existing public property, buildings will receive regular maintenance, upgrade and replacement or expansion based on approved standards

E. Economic development plan

- Will support sustainable development activities in target area so the character of the neighborhood
- Will promote and support locally owned and controlled small business including home occupation appropriate
- Will work with neighboring communities, regional agencies and government to promote land use and development policies

F. Educational Plan

- Will ensure excellent and diverse educational opportunities, services
- Will support and maintain schools where children live in close proximity and school serves wide range of community
- Will ensure safe access to school facilities



2.3 Constraints in Implementation of MTMP

The existing Right of Way (RoW) in this municipality and the carriageway width of the existing road are about 4-6 m. For the development of Municipality with efficient transportation system it is inherent to provide appropriate roadway width. Thus, the major constraint for the implementation of MTMP is to provide sufficient right of way of the roads. Again, the cost of Graveling and blacktopping for a unit length of road (per kilometre) is very high compared to the yearly budget of the municipality allocated for the road construction. Thus, the budget constraint is also the main constraints for the implementation of the MTMP. In a year the available budget shall only be sufficient for a few kilometres only. For the implementation of the master plan the participation of local people is also quite often challenging for the municipality.



CHAPTER 3 : Indicative Development Potential Map

3.1 Municipality Profile

3.1.1 Background

Paroha Municipality is located in Rautahat district, Province No. 2. This Municipality was established merging the then existing 6 VDCs namely Jingadawa (1-9), Tejapakad(1-9), Laukaha (1-9), Basantapatti(1-9), Narkatiya(1-9) and Rampurkhap(1-9). This Municipality now has been divided into 9 wards.

3.1.2 Physical location and geographical Characteristics

Geographic Location

Latitude 26°49'-26°53' N

Longitude 85°11'-85°17' E

Relative Location

East Yamunamai, Madhav Narayan, Durga Bhagwati RM

West India

North Rajpur, Ishnath Municipality

South Boudhimai, Devahi Municipality

3.1.3 Socio Economic

The demographic features and other social characteristics of this Municipality have been presented here:

Table 3: Demographic data

SN	Description	
1	Total Population	37845
2	Female	19394
3	Male	18451
4	No. of household	7072
5	Total area in sq km	37.45
6	Population Density Per Sq.KM	1011
7	Average household size	5.35

Table 4: Population in Poroha Municipality

Ward No	Population			Total No of Household	Average household size
	Male	Female	Total		
1	1099	1396	2495	454	5.50
2	1884	2162	4046	724	5.59
3	2347	2413	4760	996	4.78
4	2524	2607	5131	849	6.04
5	2050	2170	4220	695	6.07
6	1928	1966	3894	742	5.25
7	1820	1991	3811	637	5.98
8	1960	1866	3826	758	5.05
9	2839	2823	5662	1217	4.65

Wardwise Population of Paroha RM

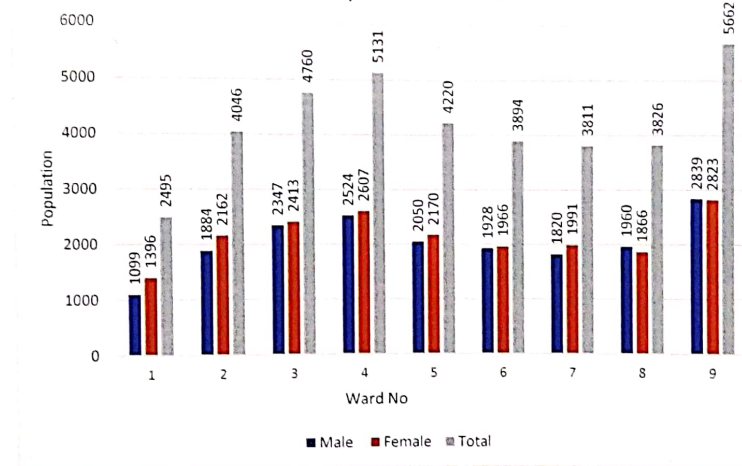


Figure 4 Population Distribution in different wards

❖ Festivals

Id, Bakarid, Moharam, Chhat, Dashain, Holi, Deepawali, Teej, Krishna Janmaasthami, Bibah Panchami etc



❖ Ethnic groups

Table 5: Population Distribution based on Ethnicity

SN	Ethnic Group	Population	Percentage
1	Muslim	15795	41.74
2	Kurmi	5099	13.47
3	Yadav	2576	6.81
4	Teli	1714	4.53
5	Nuniya	1336	3.53
6	Chamar/Harijan/Ram	1168	3.09
7	Kalawar	922	2.44
8	Dhobi	842	2.23
9	Kanu	793	2.10
10	Dushadha/Pashwan	781	2.06
11	Barai	709	1.87
12	Koiri/Kushwa	700	1.85
13	Mallaha	660	1.74
14	Lohar	607	1.60
15	Kumal	490	1.29
16	Tatma/tatwa	480	1.27
17	Hajam/Thakur	416	1.10
18	Thakuri	308	0.81
19	Sanayasi/Dashnami	289	0.76
20	Rajput	256	0.68
21	Brahmin Terai	243	0.64
22	Others	1658	4.38

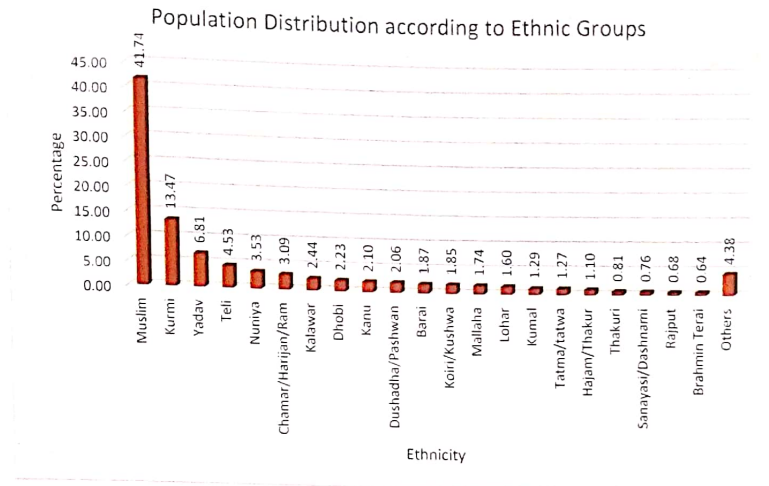


Figure 5 Population Distribution Based on Ethnicity

❖ Literacy Rate

The literacy rate of this Municipality is 37.22%.

3.2 List of Potential Development Area's

3.2.1 Existing/Potential Area for Tourism, Religious and Historical Place

S.N.	Name	Address	Importance
1	Jume Masjid	Jingadawa 1	Religious
2	Brahmasthan Mandir	Jingadawa Tol 2	Religious
3	Jame Masjid	Jingadawa Tol 2	Religious
4	Brahmasthan	Tejapakad 3	Religious
5	Mahadevsthan	Tejapakad 3	Religious
6	Masjid	Tejapakad 3	Religious
7	Brahma Jyoti Mandir	Laukaha 4	Religious
8	Masjid Kurba	Laukaha 4	Religious
9	Ram Janaki Mandir	Laukaha 4	Religious and Cultural
10	Shiva Mandir	Laukaha 4	Religious and Cultural
11	Sahid Karwala Masjid	Laukaha 4	Religious

S.N.	Name	Address	Importance
12	Yagyasala Mandir	Bhediyahi 7	Religious
13	Ram Janaki Math	Namnagara 7	Religious
14	Jame Masjid	Namnagara 7	Religious
15	Pokhariya Jame Masjid	Damar 7	Religious
16	Ram Janaki Mandir	Narkatiya 7	Religious
17	Hanuman Mandir	Khanp Tol 7	Religious
18	Jamiya Sahifaya Masjid	Narkatiya 7	Religious
19	Jagannath Mandir	Narkatiya 8	Religious
20	Chardham Mandir	Motipur 8	Religious
21	Brahmasthan Mandir	Narkatiya 8	Religious
22	Jyama Masjid	Narkatiya 8	Religious
23	Tajwidulkuran Masjid	Narkatiya 8	Religious
24	Ram Janaki Math	Narkatiya 8	Religious
25	Ram Janaki Mandir	Rampur 9	Religious and Cultural
26	Manakamana Baba Mandir	Khanp 9	Religious and Cultural
27	Jame Masjid	Khanp 9	Religious
28	Jame Masjid	Khanp 9	Religious
29	Chathghat Pokhari	Rampur 9	Religious and Cultural

3.2.2 Potential Area for Cottage and Industries

S.N.	Name of Industry	Type of Industry	Address
1	Raj Brick Factory	Brick Factory	Jingadawa 1
2	Sanjay Brick Factory	Brick Factory	Jingadawa 1
3	Chand Animal Farm	Gharelu	Jingadawa 1
4	Gauro Poultry Farm	Gharelu	Jingadawa 1
5	Seikh Bali Ullah Poultry Farm	Gharelu	Jingadawa 1
6	Aman Rice Mill	Gharelu	Tejapakad 3
7	Rice Mill	Gharelu	Tejapakad 3
8	Battery Factory	Battery Factory	Laukaha 4
9	Aman Brick Factory	Brick Factory	Laukaha 4
10	Chand Brick Factory	Brick Factory	Laukaha 4
11	Aalam Brick Factory	Brick Factory	Laukaha 4



S.N.	Name of Industry	Type of Industry	Address
12	Sahu Brick Factory	Brick Factory	Namnagara 5
13	Sona Brick Factory	Brick Factory	Bhediya 5
14	Surya Brick Factory	Brick Factory	Bhediya 5
15	Rakesh Furniture Factory	Furniture	Bhediya 5
16	Anmol Brick Factory	Brick Factory	Namnagara 5
17	Sky Brick Factory	Brick Factory	Namnagara 5
18	Surya Brick Factory	Brick Factory	Bhediya 6
19	Sona Brick Factory	Brick Factory	Across Bhakuwa River
20	Nepal Brick Factory	Brick Factory	Across Bhakuwa River
21	Shanti Brick Factory	Brick Factory	Way to Kopuwa 7
22	Radhika Mill	Gharelu	Narkatiya 7
23	Rabita Rice and Seller Mill	Gharelu	Narkatiya 7
24	New Nepal Brick Factory	Brick Factory	Khanp Tol 9
25	Khursid Furniture Factory	Furniture	Khanp Tol 9

3.2.3 Agriculture and Livestock Potential Area

This municipality has potential in agricultural and livestock farming. Some of them are listed below.

S.N.	Main Crops	Area
1	Rice	Jingadawa 1 and 2, Brahmasthan, Boudhimai 3, Pokhariya, Laukaha 4, Bhediya, Namnagara, Damar 5, Basantapatti Bhediya 6, Ghodar, Chauri, Pachiyari Tol, Dahiyard, Bakhum River Over 7, Purwari Tol, Pachari Tol, Dakshin Tol, Uttar Tol, All area 8, Rampur Khanp Tol 9
2	Wheat	Jingadawa 1 and 2, Brahmasthan, Boudhimai 3, Pokhariya, Laukaha 4, Bhediya, Namnagara, Damar 5, Basantapatti Bhediya 6, Ghodar, Chauri, Pachiyari Tol, Dahiyard, Bakhum River Over 7, Purwari Tol, Pachari Tol, Dakshin Tol, Uttar Tol, All area 8, Rampur Khanp Tol 9
3	Masuri Dal	Jingadawa 1 and 2, Brahmasthan, Boudhimai 3, Pokhariya, Laukaha 4, Basantapatti Bhediya 6, Ghodar, Chauri, Pachiyari Tol, Dahiyard, Bakhum River Over 7, Purwari Tol, Pachari Tol, Dakshin Tol, Uttar Tol, All area 8, Rampur Khanp Tol 9
4	Sugarcane	Jingadawa 1 and 2, Brahmasthan, Boudhimai 3, Pokhariya, Laukaha 4, Bhediya, Namnagara, Damar 5, Basantapatti Bhediya 6, Rampur Khanp Tol 9
5	Vegetables	Jingadawa 1, Brahmasthan, Boudhimai 3, Pokhariya, Laukaha 4, Bhediya, Damar 5, Rampur Khanp Tol 9



S.N.	Main Crops	Area
6	Maize	Jingadawa 2, Brahmasthan, Boudhimai 3, Pokhariya, Laukaha 4, Bhediyahi 5, Purwari Tol, Pachari Tol, Dakshin Tol, Uttar Tol, All area 8
7	Mustard Oil	Basantapatti Bhediyahi 6, Ghodar, Chauri, Pachiyari Tol, Dahiyard, Bakhum River Over 7, Purwari Tol, Pachari Tol, Dakshin Tol, Uttar Tol, All area 8

S.N.	Livestock	Potential Pocket Area
1	Cow/Buffalo Farming	Various places
2	Goat/Pig Farming	Various places
3	Fish Farming	Various places
4	Hen/duck Farming	Various places

3.3 Service Centres and Growth Centres

3.3.1 Health

S.N.	Name	Types	Address
1	Samudayik Health Post	Health Post	Jingadawa 1
2	Jingadawa Health Post	Health Post	Jingadawa 2
3	Health Post, Tejapakad	Health Post, Prasuti Griha	Tejapakad 3
4	Samudayik Health Post	Health Post	Pokhariya 4
5	Sahari Health Center	Health Post	Bhediyahi Bazar 5
6	Health Post, Basantapatti	Health Post	Bhediyahi 6
7	Health Post, Narkatiya	Health Post	Narkatiya 8
8	Health Post, Rampur Khanp	Health Post	Rampur 9

3.3.2 Market Centres

S.N.	Trade Area	Types	Address
1	School Chowk	Haat Bazar	School Tol 2
2	Tejapakad Bazar	Haat Bazar, Bazar Chhetra	Tejapakad 3
3	Laukaha Bazar	Haat Bazar	Laukaha 4
4	Bhediyati Bazar	Haat Bazar	Bhediyati 5
5	Basantapatti Bazar	Haat Bazar	Basantapatti 6
6	Purano Bazar	Haat Bazar, Bazar Chhetra	Narkatiya 8
7	Basir Chowk	Haat Bazar, Bazar Chhetra	Narkatiya 8



3.3.3 Security Post office

S.N.	Name of Security Service	Address
1	Police Post	Jingadawa (Temporary) 1, Laukaha Bajar 4, Narkatiya Khanp Tol Center 7, Narkatiya 8, Rampur 9
2	Armed Police Force Camp	Khanp 9

3.3.4 Telecommunication

Telephone facilities are available in most places of this Municipality. But the service is not satisfactory.

S.N.	Communication	Quantity	Remarks
1	NCELL Tower	3	

3.4 Traffic Volume Study

According to traffic survey conducted, walking is the most common mode of transportation. In case of short distance people preferred cycling. Bullock carts and tractors are used for the transportation of agricultural products. Due to lack of good roads, use of modes of public transport like bus for travelling purpose was found to be very less. Few number of trucks were found to be used for the purpose of transportation of goods, agricultural products etc. to and from the production area and market center.

3.4.1 Mode Choice

People choose the mode of transportation as per their convenience and their requirement. Different factors affect the mode choice. Some of them are:

- Household characteristics
 - ✓ Income
 - ✓ Household structures
- Zone characteristics
 - ✓ Land use
 - ✓ Land price
- Residential density, rate of urbanization
- Accessibility
- Vehicle ownership
- Quality of local public transit
- Purpose of travel, nature of work
- Travel time, cost and distance



3.4.2 Future Traffic Forecast

Traffic forecasting is the process of estimating the number of vehicles or people that are likely to use different transportation facilities in the future. Forecasting and estimation of growth in vehicular population of any major transportation engineering development requires capturing the past trend and using it to predict the future trend based on qualified assumptions, simulations and models created using explanatory variables.

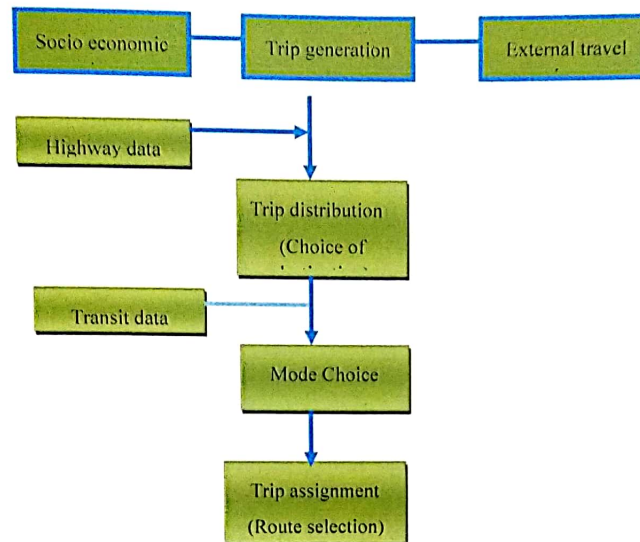


Figure 6 Flow chart of travel demand forecasting

From the traffic survey conducted at this Municipality following traffic data were collected and future traffic were forecasted taking growth rate 7% using following formulae:

$$F = P(1+r)^n$$

Where;

F = Future traffic

r = growth rate

n = number of years

P = Present traffic



CHAPTER 4: Municipality Inventory Map of Road Network

Road Inventory Survey was done with the help of the earlier prepared GIS base map of the municipality and Road inventory form. Field verification of the base map was done with the help of GPS survey. Road inventory survey was done from one nodal point to another in each road sections collecting information related to road surface, crossing structure, road condition, and linkages to the large settlements, economically active spaces, existing service centres, potential growth centres, potential areas of development, areas of special considerations and direct link to another linkage. From data of the road inventory survey, MIM is prepared. And based on the earlier study of Potential areas and MIM, IDPM was prepared.

4.1 Overview of Road Inventory

The Study had identified 150.33 Km of road network with in the Municipality. Most of the roads in this Municipality are Earthen (74%) followed by Gravelled (19%) road and only few km of road is Metallic. Further, demand for new construction was 9.2 Km that need to be carried out to meet the road access up to public access of road network. A few kilometres of road (14.17km) which was gravelled was constructed and maintained by DOR lying under SRN. Rest of roads including 4.88 km district roads are earthen. Again, about 73% of the roads are below 4 m wide. Only 25% of Road Section are wider than 6 meter and most of these roads fall under DRCN and SRN.

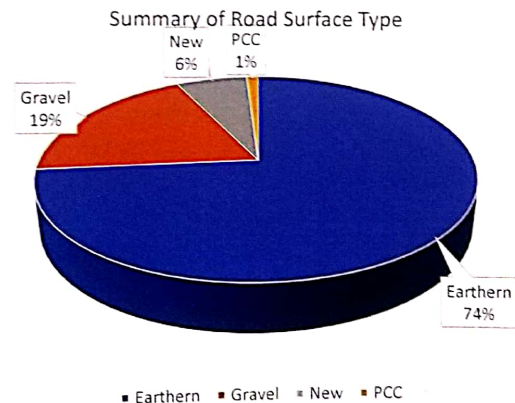


Figure 7 Road Length According to surface type

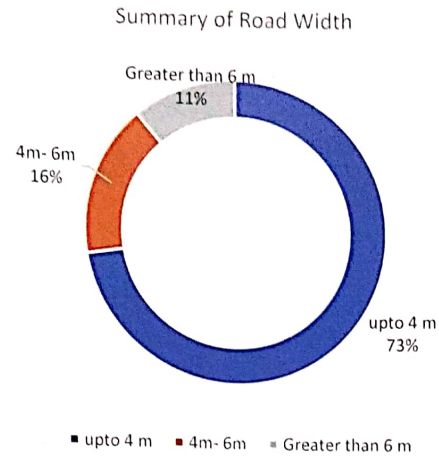


Figure 8 Percentage of Road distribution by Width

4.2 Land use and Road Density

4.2.1 Land use

Land use and transportation are interdependent. Mobility, especially in the form of motorized transport requires an increasing share of land. Long term sustainability should be considered by altering the urban structure itself. Like Transportation demands that are concentrated in down town areas can be dispersed to city sub centres which will help in relieving congestion and promoting development of a more balanced society.

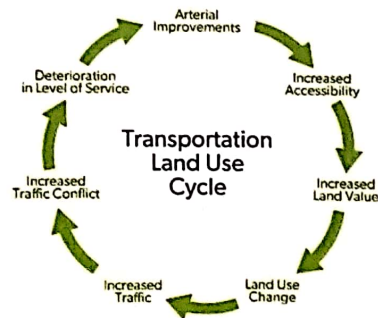


Figure 9 Transportation landuse Cycle

Roads are often built or improved to allow greater access to new development. The road improvement makes other land along the road more accessible and attractive for further development. With more housing and services along the road, traffic volumes increase resulting in more congestion and decreased road capacity. Eventually the reduced efficiency of the road necessitates more roadway improvements which can lead to additional development along the road and restart the land use transportation cycle.

When the land use transportation cycle occurs over and over in a newly developed city or semi urban, the pressure of road capacity increases. The municipality transport master plan is one among the many planning efforts which will reflect the efforts to define where we work, play and how we move from one place to another. Both population and traffic volume forecasting are considered during the planning.

In this regard, this Municipality has the following type of existing land- use situation (refer land-use map. For further planning of this Rural municipality we should think for the probable settlement extension area.

Table 6: Ward wise landuse Pattern

wards	Agriculture	Brick kiln area	builtup	Canal	Dugout area	orchard	Open space	pond	River	sand	Grand Total
1	3.07	0.01	0.20		0.08	0.12			0.02		3.50
2	1.47		0.17			0.15			0.11	0.14	2.04
3	6.73		0.31			0.34	0.04	0.00	0.21	0.50	8.14
4	2.53	0.03	0.29	0.01	0.13	0.12		0.01			3.12
5	2.96	0.02	0.25	0.01	0.12	0.32		0.04			3.72
6	5.51	0.01	0.19	0.03	0.06	0.22		0.07			6.08
7	3.83	0.01	0.23	0.02	0.01	0.27		0.03	0.03		4.44
8	2.11	0.00	0.13	0.03	0.01	0.20	0.00	0.03	0.01		2.53
9	3.22	0.00	0.26	0.01	0.03	0.25	0.00	0.11			3.87
Total	31.43	0.09	2.02	0.11	0.44	2.00	0.05	0.29	0.38	0.64	37.45



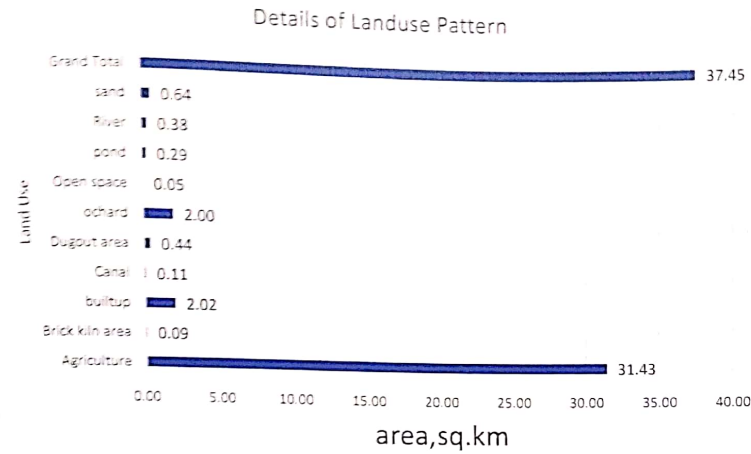
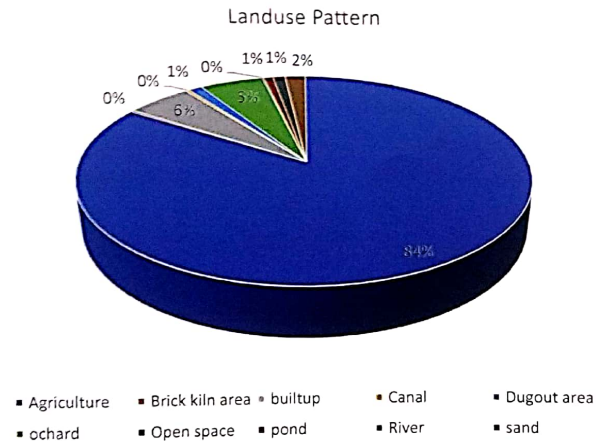


Figure 10 Landuse Pattern in Paroha Municipality



4.2.2 Road Density

According to National urban strategy 2015, the target of urban road density is 7.5 km per square km land area. Paroha Municipality has 133.76 km of road network with its total area 37.45 sq.km. But most of the roads are earthen and are very narrow (<6.0 m) to address the trip generated from various area. The ward wise distribution of road over total area and



population pattern has been presented. The road density as observed for total area of municipality is found as 4.01 km road per square km area. Again, the Average density of road per 1000 population is found as 121.26 km. The varying level of density (based on area) shall be analysed by using density based on population served and area. The density based on population replicates that the density so high that most of population have access of road or either there is high road density on certain place only. In such condition, instead of construction of new roads the time has arrived to give attention over condition of road. However, with these finding the major challenge for the development of road is to make them more operational.

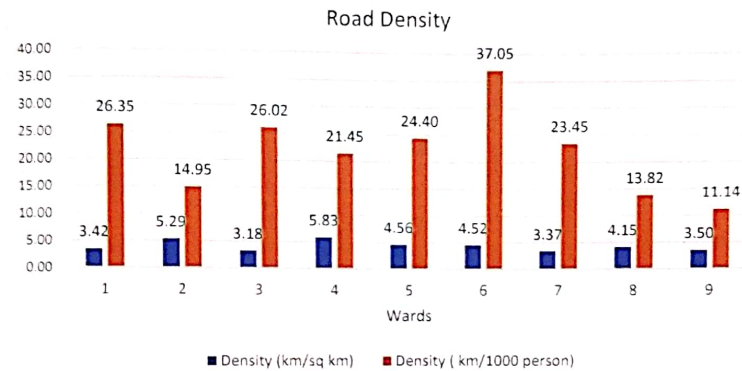


Figure 11 Road Density

Table 7: Ward-Wise Population, Area and Road Density

Ward No	Total Population	Area sq.km	Road length km	Density (km/sq km)	Density (km/1000 person)
1	2495	3.50	11.96	3.42	26.35
2	4046	2.04	10.82	5.29	14.95
3	4760	8.14	25.92	3.18	26.02
4	5131	3.12	18.21	5.83	21.45
5	4220	3.72	16.96	4.56	24.40
6	3894	6.08	27.49	4.52	37.05
7	3811	4.44	14.94	3.37	23.45
8	3826	2.53	10.47	4.15	13.82
9	5662	3.87	13.56	3.50	11.14
Total	37845	37.45	150.33	4.20	22.07
					Average

4.3 Grading and Nomenclature of Roads

Road network serve for direct access to the particular land-use by the provision of pedestrian footpaths, bicycle tracks, bus and vehicle routes and cater through traffic that is not related to immediate land uses. Functional provisions of passenger and goods movement mainly define the hierarchy of roads and their classification. On the basis of this concept, roads are classified as per their function. Road class is related to the technical standard and functional requirements. Therefore, road classification should be based on its functional hierarchy. It is important to distinguish roads in different class or type based on various criteria. A road hierarchy is a means of defining each roadway in terms of its function such that appropriate objectives for that roadway can be set and appropriate design criteria can be implemented. It is an important instrument of road network and land use planning.



Figure 14A Conceptual Hierarchy



Figure 14B Road Network Hierarchy

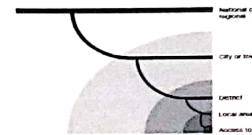


Figure 14C Urban Road Hierarchy

There are restrictions of direct linkage between various kinds of road-hierarchy. In other words, direct connections between certain types of road links should be reduced, for example residential streets and arterial roads. Connections between similar order streets should be made (e.g. arterial to arterial) or between street types that are separated by one level in the hierarchy (e.g. arterial to highway and collector to arterial.). This conceptual framework can be seen from Figure (A, B, C). These hierarchical distinctions of road types become clearer when considering the recommended design specifications for the number of through lanes, design speed, intersection spacing and driveway access.

A well-formed road hierarchy increases the performance and efficiency of the particular type of road as well as of the entire road network. Furthermore, it reduces overall impact of traffic by concentrating longer distance flow onto routes in less sensitive locations, ensuring land uses and activities that are incompatible with traffic flow are restricted from routes where traffic movement should predominate and preserving areas where through traffic is discouraged.

The concepts of road hierarchy assist in planning of overall road network and its transport services. Different hierarchy of road has different effect in surrounding areas and other roadways. Hierarchies of roads enable urban design principles such as accessibility,



connectivity, efficiency, amenity and safety. Further, it also identifies treatments such as barriers, buffers and landscaping to preserve amenity for adjacent land uses. Thus, a proper plan should accommodate all users of the urban streets in planning, designing and construction of the road infrastructure and furniture. Municipality road network can be conceptualized by considering the functional hierarchy as arterial, sub-arterial and urban roads of various categories such as Class A, Class B, Class C and Class D.

4.3.1 Right of Way for Roads of different Classes

The DTMP guideline has expected roads under category of National Highway (NH), Feeder Roads (FR) and District Roads (DRCN) within the municipality area. The RoW of these roads are considered as per respective Guidelines. i.e the RoW of National Highways, Feeder Roads and District Roads are 50.0 m, 30.0 m and 20.0 m. The guideline has clearly stated about the setback distance for these roads (having RoW ≥ 20.0) as 6.0 m on either side. All of these standards shall be applied to the municipality accordingly. On discussion with the MRCC, they have made consensus to reduce the right of way of the municipal roads than the minimum RoW that has been recommended by the MTMP guides as greater road width will be inconvenient to them as the greater RoW will create serious problems in road expansion in the major/market areas where there is dense settlement. Moreover, citing the same reason, the MRCC has made consensus on changing the class of the road than that the consultant team has suggested in its Final report. In this final report, there is only one road that has been included in class A road, the numbers of same class road were 5 in Final report.

Table 8: Urban Road Class and Features

S.N.	Type of road	Class	RoW
1	Main collector road	A	15m
2	Other collector road	B	10m
3	Main tole road	C	8m
4	Other roads	D	6m

Based on DTMP guideline, the building line or setback shall be maintained 6.0 m for roads having RoW equal to or more than 20.0 m and 2.0 m for other roads. However, Nepal Road Standards-2070 has considered the setback distance at curved section only and that should be sufficient to provide the adequate sight distance. It is silent about the building line.



१४.३१ अब निर्माण हुने सडकको कुनै पनि बाटोको न्यूनतम चौडाई ६ मी. हुनु पर्नेछ र नापी तथा मालपोत कार्यालयहरूलाई सोही बमिजिमले सेस्ता, नक्सा तथा अभिलेखहरूमा बाटो कायम गरी यस व्यवस्थाको कार्यन्वयन गर्न लेखि पठाउनु पर्नेछ। । यस्ता बाटोमा भवन निर्माण स्वीकृत दिँदा केन्द्रबाट कम्तिमा ३ मीटर सडकको क्षेत्राधिकार (RoW) र सडक क्षेत्राधिकार सिमाबाट १.५ मीटर सेट ब्याक छाडेर मात्र निर्माण स्वीकृति दिनु पर्नेछ। तर हिमाली/पहाडी जिल्लाका उपत्यका (valley) एवं समथल भू-भाग देखि बाहेकका भिरालो क्षेत्रमा प्राविधिकरूपमा उक्त ६ मिटर चौडाई कायम गर्न सम्भव नभएमा प्राविधिकको प्रतिवेदनको आधारमा सम्बन्धित स्थानीय निकायको परिषद्को निर्णयबाट ४ मिटरमा नघट्ने गरी निर्धारण गर्न सक्नेछ।

१४.३६ नगरपालिका क्षेत्रमा सडक सम्बन्धी ऐन लगायत प्रचलित कानूनले तोकेमा सोही अनुसार र सो नभएमा नगर यातायात गुरुयोजनाले निर्धारण गरे अनुरूप सेटब्याक कायम हुनेछ। तर नगरपालिकाले यस्तो सेटब्याक सडक किनारबाट १.५ मिटर भन्दा कम हुने गरी निर्धारण गर्ने छैन।

१४.३८ नयाँ बाटोको घुम्ति वा मोडको न्यूनतम अर्धव्यास बाटोको चौडाई भन्दा २०% ले बढी चौडा भएको हुनु पर्नेछ।

(Source :- Fundamental Guidelines for Settlement Development, Urban Planning and Building Construction - 2072 (2015 AD))

However, according to **Fundamental Guidelines for Settlement Development, Urban Planning and Building Construction-2072 (2015 AD)**, the minimum setback distance for urban roads as 1.5 m on either side. Again, the minimum of Row of roads has set as 6.0 m. i.e 3.0 m on either side form the centreline. A portion of this guideline has presented herewith.

4.3.2 Urban Road Classification

Roads under jurisdiction of Municipal authority are referred as urban roads. The classification practices of urban roads basically are guided by the functional hierarchy of roads. In the context of Nepal, Department of Roads (DoR) has classified urban roads as Arterial, Sub-arterial, Collector and Local/Residential Street in its Urban Road Standard 2068 (Final). The ToR provided for the preparation of MTMP has formulated the class of roads into A, B, C and D.



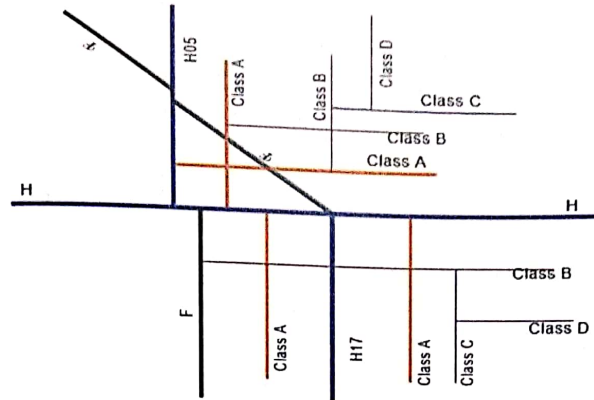


Figure 15 Detail description of Road class

The fundamental parameters of the urban road are shown in figure 13. Municipality has a complete road network hierarchy consisting of National Highways, Feeder Roads, District Roads and Urban Roads of all four classes. The conceptual layout based on the functional hierarchy of the entire road network is shown in Figure .

❖ National Highways

Arterial roads in Municipality are taken as the links of National Highways. The technical standards of these roads are taken from the DoR directives for Right of Way (RoW) and other features.

❖ Feeder Roads

Feeder roads are taken as the sub-arterial road in Municipality. The technical standards for this category are taken as mentioned by the DoR road Standard. These roads have relatively higher traffic with through movement of local vehicles.

❖ Class A Roads

Class A roads serve as the major collector roads. These roads start either from the Arterial or Sub-Arterial road. These roads are of relatively long distance which connect big market or settlement areas or two or more wards centres within the Municipality.

❖ Class B Roads

Class B roads are of secondary type of collector roads. These may serve as the collector to the Class A roads with the relatively lower geometric standard. Intersection and other parameters may be taken as similar as Class A roads.



❖ Class C and Class D Roads

Class C roads are residential street and they provide access to the private property and small industrial or public place. These roads serve mainly for small/light vehicular movement for low volume intensity. If these roads connect one or more residential blocks then they are taken as Class C. If they collect from or end to the single residential block then they are referred as Class D roads. These serve for internal traffic movement without through traffic movement.

4.3.3 Coding of Municipality Roads

Once the roads are finalized, each municipal roads are assigned a road code. Coding of road is done based on the guidelines of DTMP and MTMP. Provision of those guidelines have been slightly modified as per the restructuring of the nation into the federal system.

- First digit (1-7) represents the Province Number. Code 1 Stand for Province No. 1 and similarly for other provinces.
- Second and third digits represent particular district (1-77). Rautahat District is coded by 32.
- Fourth code M stands for Municipality
- Fifth and sixth digits represents the particular municipality in that district. Paroha RM is coded by 04.
- Seventh code indicates letter A-D for particular Class of road.
- Next three digits (000-999) represents the particular transport linkage.

2	32	M	15	A	001	Sample Coding
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Coding of Municipality Roads

The following guidelines shall be followed when coding. Each integer linkage will have a corresponding map image for a particular linkage.

- First digit (numbers varying from 1 to 2) represent

1	2	3	4	5	6	7	8	9	0
---	---	---	---	---	---	---	---	---	---
- Second and Third digits (numbers varying from 0 to 9) represent

0	1	2	3	4	5	6	7	8	9
---	---	---	---	---	---	---	---	---	---
- Fourth digit (to letter M) indicates Municipality

0	1	2	3	4	5	6	7	8	9	M
---	---	---	---	---	---	---	---	---	---	---
- Fifth and Sixth digits (numbers varying from 0 to 9) represent Municipality in the District

0	1	2	3	4	5	6	7	8	9
---	---	---	---	---	---	---	---	---	---
- Seventh digit (to letter B or 1-9) indicates the Class of Road

0	1	2	3	4	5	6	7	8	9	B	1	2	3	4	5	6	7	8	9
---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
- Next Three digits (numbers varying from 001 to 999) represent the particular integer linkage

1	2	3	4	5	6	7	8	9	0	1	2	3	4	5	6	7	8	9	0	1	2	3	4	5	6	7	8	9	0	1	2	3	4	5	6	7	8	9
---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---

Development Region

District (1-75)

Municipality

Municipal number of district

Class of road

Number of Roads

Column 6

Column 7

Legend:

A = Road Class A - Main Collector Road

B = Road Class B - Urban Collector Road

C = Road Class C - Feeder Road

D = Road Class D - Other Road

Figure 16 Coding of Municipal Roads

4.4 Summary of Road Class A

These roads are major transport corridors within the municipal territory. These roads are assumed to have higher traffic and they connect major settlements or market areas within the municipality. Functionally these roads carry the traffic from major settlements, tourist areas to the SRN linkages. As per the available RoW and land use pattern typical cross section may be selected as shown in figure below. Minimum Row for this class of road has been set to 15 m. It is highly recommended to have separate segment for pedestrian and cycle track. At the same time, these roads need to have adequate median strip to segregate vehicles coming from different directions.

There are altogether 11 Municipal roads that lie in road class A.

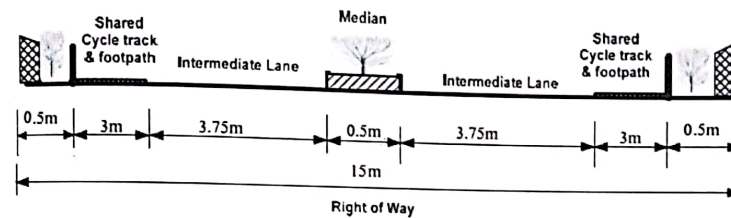


Figure 17 Typical Cross-section for Class A Roads

Table 9: List of Class A Roads

Road Code	Road Name	HH served	Ward Pass	Road width	Existing bridge	New bridge proposed	Culvert	BT	Earthen	Gravel	New PCC	Grand Total
232M15A001	Bhediyahi-Laukaha-Pokhariya	2177	4	3.5			0.023		0.845			0.868

4.5 Summary of Road Class B

These roads serve for the purpose of collectors from relatively small settlements and having less traffic flow. The RoW for such class of roads is minimum of 10 m. The typical cross section of such roads is shown in figure below. These roads serve as linkage to class A roads. These roads have been categorized based on public demand as well as keeping in view the future need of municipality. These roads will be served by smaller public transport modes.



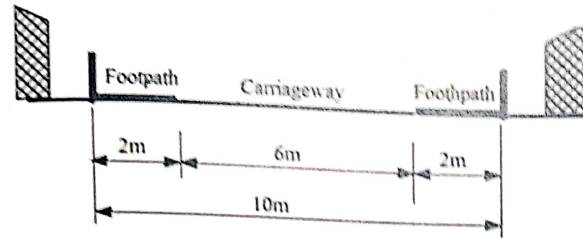


Figure 18: Typical Cross-section for Class B Roads

Table 10: List of Class B Roads

Road Code	Road Name	HH served	Ward Pass	Road width	Existing bridge	New bridge proposed	Culvert	BT	Earthern	Gravel	New PCC	Grand Total
232M1 5B001	Khap Bata Purba Dakshin Simana Hudai Bharatiya Simana Samma	1097	9	6					0.529			0.529
232M1 5B002	Raj Devi Mandir To Chhath Ghat Hudai Mansari Road Samma	2158	9	3.5					0.943			0.943
232M1 5B003	Mul Sadak Bata Mansuri Simana Sadak	250	8.9	3					0.727	0.447		1.174
232M1 5B004	Khap - Badimasjid- Mansari	2375	9	6				1.413				1.413
232M1 5B005	Narkatiya Bata Nahar Ko Culvert Bata Bharatiya Simana Jane Bato	2915	8	4			0.018		1.266			1.284
232M1 5B006	Mul Sadak Bata Wada 8 Ko Karyalaya Hudai Bhkuwa Khola Hudai Rajmarga Jodne Sadak	2363	7.8	6	0.020				0.920			0.939
232M1 5B007	Tejapakad-Lal Bakaiya- Jingadawa Belichawa	2891	2.3	3		0.196	0.008		0.781	0.530		1.514
232M1 5B008	Bhediya -Tejapakad	14173	4.6	6			0.022		2.821			2.843
232M1 5B009	Sukdev Chowk Bata Purba Highway Jodne Mul Sadak Belichawa	1123	1	7					1.560			1.560
232M1 5B010	Sukdev Chowk -Jarlnel Ko Ghar Bata Nahar Hudai Badh Jane Sadak	4703	1,2,3	3.75					1.340			1.340
232M1	Sheikh Id Ko Pokhari Bata Uttar-Shekh Islam Ko	1666	3.6	3					0.942			0.942

Road Code	Road Name	HH served	Ward	Pass	Road width	Existing bridge	New bridge proposed	Culvert	BT	Barthem	Gravel	New PCC	Grand Total
5B011	Krishi Farm Jodne Sadak												
232M1	Narkatiya Purbari	663	7	3						0.442			0.442
5B012	Madarsa To Chhath Ghat												
232M1	Lalbakaiya Badh Hudai	1552	1,2,3	3						4.434			4.434
5B013	Malhiniya Jane Sadak												
232M1	Bhediya-Basantapatti	3693	5,6	3						1.497			1.497
5B014													
232M1	Bhediya-Bata Purba	3058	4,5,6	6						0.570			0.570
5B015	Wada 4 Ko Simana Samma Ko Sadak												
232M1	Pokhariya Damar Bata	236	3,4	3						1.096			1.096
5B016	Uttar-Pokhariya Mandir												
232M1	Battery Company Bata	2177	4,6	3							0.796		0.796
5B017	Purba Pokhariya Gahatoli Sadak												
232M1	Lalbakaiya Badh Sadak	63	3	4						6.467			6.467
5B018													
232M1	Teipakad-Laukaha-Pokhariya	6274	3,4	3						1.814			1.814
5B019													
232M1	Jidagawa belbichawa bata												
5B020	Uttar Falahull Muslimin Madarsa hudai dewahi gonahi na pa jane sadak	300	1	4						0.409			0.408

4.6 Summary of Road Class C

These types of urban roads are for the purpose of residential access. Residential streets are designed for lower traffic volumes for especially private transport. Therefore, RoW for this class is designed for single lane pavement. Minimum RoW for such class of roads is allocated as 8 m. Typical cross section of such roads is shown below.

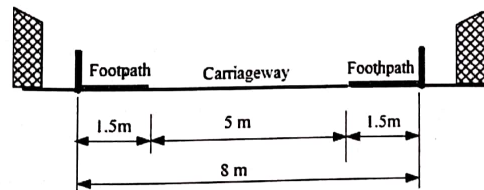


Figure 19 Typical Cross-section for Class C Roads



Table 11: List of Class C roads

Road Code	Road Name	HH served	Ward Pass	Road width	Existing bridge	New bridge proposed	Culvert	BT	Earthen	Gravel	New	PCC	Grand Total
232M1 SC001	Jugul Rautko Ghar-Prithvi Narayan Rautko Ghar Bata Kabrasthan Jane Bato	3195	9	4					1.18		0.40		1.58
232M1 SC002	Swastha Chowki Bata Panitanki Chowk Bata Dasgaja	85	9	2					0.40		0.00		0.41
232M1 SC003	Khap Tole bata Bikhadas Tatma Ko Ghar Samma Bato	316	9	0							0.78		0.78
232M1 SC004	Boudimai ko mandir bata purba uttar hudai Bikhadas tatma ko ghar jane bato	1614	9	3					0.71				0.71
232M1 SC005	Rampur,Dakshinwari Tole Bata Damar Hudai Rajpur Jane Bato	2527	9	3					0.59				0.59
232M1 SC006	Bramhathan Bata Rajdevi Mandir Jane Bato	1088	9	3					0.18				0.18
232M1 SC007	Sofi Mahat Ko Ghar Bata Purba Sikhadas Ko Ghar Hudaidakshinwari Tole- Rajdevi Mandir	2877	9	3					0.46				0.46
232M1 SC008	Rampur Gaun Jugal Raut Ko Ghar Bata Hanuman Mandir Bata Dasgaja	2746	9	2					0.66		0.01		0.67
232M1 SC009	Rampur-Idgaha Bata Bharat Simana Samma	3009	9	3			0.00		0.84				0.84
232M1 SC010	Mul Sadak Bata Wada Simana Hudai Bharatiya Simana Jane Bato	150	9	5			0.00		0.98				0.99
232M1 SC011	Bhakuwa Khola Jholunge Pul Isanath Napa Ko Simana Sadak	261	5,8	3.75	0.022				2.33				2.35
232M1 SC012	Rampur Bata-Narkatiya Jane Bato	2246	8	3					0.93				0.93
232M1 SC013	Purano Bazaar-Bramhathan Bata Uttar Hudai Mul Sadak Jodne Sadak	4331	7,8	8								0.40	0.40
232M1 SC014	Narkatiya- Gaun Bata-Idagah Bata Bharatiya Simana Samma	4653	7,8	8			0.01		1.21				1.21



Road Code	Road Name	HH served	Ward Pass	Road width	Existing bridge	New bridge proposed	Culvert	BT	Earthen	Gravel	New	PCC	Grand Total
232M1 5C015	Mahendra Shahko Khet Dekhi-Narakatiya Simana Samma		6	3					1.37				1.37
232M1 5C016	Bhediyanhi, Satinder Patel Ko Ghar Bata Paschim Motipur Jane Bato	1494	5	3					1.14				1.14
232M1 5C017	Basantapatti Ma Bi To Madan Shah Ko Ghar Samma	6719	3,6	6					2.55				2.55
232M1 5C018	Pokhariya Sabik Ward 9 To Paschim Battery Factory Hudai Gramin Sakakari Chowk	678	6	2					0.44				0.44
232M1 5C019	Inarwari Simana Sadak		3	3					0.79				0.79
232M1 5C020	Tejapakad Chowk- Bramhathan- Baudimai Chowk	369	3	3					1.03				1.03
232M1 5C021	Shiva Mandir Chowk Bata Jalandhar Ko Ghar Hudai Uttar Baudimai Chowk	2795	3	3					0.29	1.10			1.39
232M1 5C022	Pokhariya Ram Janaki Math Dekhi Badh Samma	1173	3	3.75					0.43				0.43
232M1 5C023	Mul Sadak Pokhariya Tol Bata Purba Lal Bakaiya Badh Jane Sadak	136	3	3					0.38				0.38
232M1 5C024	Pokhariya Ghadari-Sheikh Abulesh Ko Ghar Hudai Uttar-Lala Bakaiya Badh Jane Sadak	763	3,4	4					1.05				1.05
232M1 5C025	Pokhariya Damar Bata Ita Bhatta Hudai Laukaha Jane Sadak	1782	4,5	3					1.08				1.08
232M1 5C026	Pokhariya Damar--Lalbakaiya Badh Jane Sadak	246	3	3					1.31				1.31
232M1 5C027	Pokhariya Ghadari-Jigadawa Belbichawa	7685	1,2,3	5		0.126	0.03		3.60				3.75
232M1 5C028	Jhingdwa Aa Bi To Purba Jane Kamdehi Nadi Hudai Main Road Jane	704	1	5					1.33				1.33
232M1 5C029	Bandh Bata Uttar Nahar Ko Culvert Jodne Sadak		1	3.75					0.74				0.74

Road Code	Road Name	HH served	Ward No	Road width	Existing bridge	New bridge proposed	Culvert	DT	Earthen	Gravel	New	PCC	Grand Total
232M1 SC030	Jigadawa Nimah Bata Paschim-Nanak Mahara Ko Ghar Hudai Badh Samma Sadak	4293	2	5					1.23				1.23
232M1 SC031	Safal Ko Ghar-Bata Uttar Isha Mohammad Ko Ghar Bata Uttar-Nageswornath Mandir Hudai Nahar Ko Culvert Jodne Sadak	1637	2	3.75					0.61				0.61
232M1 SC032	Sukhadi Ko Ghar Bata Paschim Jamir Akhtar Ko Ghar Hudai Nahar Ko Culvert Jodne Sadak	3728	2	3.75			0.01		0.72		0.26		0.98
232M1 SC033	Bipat Ko Ghar - Uttar Purba Hudai Bheiyahai Simana Sadak	343	1	3.75					1.23				1.23
232M1 SC034	Jigadawa Belbichawa- Musaharitol	3734	1	3.75					0.41				0.41
232M1 SC035	Jigadawa Belbichawa Bata Masahartol Jane Bato	792	1,2,3	3.75					0.85				0.85
232M1 SC036	Canal Road	1806	7,8,9	4					3.97				3.97
232M1 SC037	Namnagada Bata Paschim Motopur Jane Bato	2680	5,8	8	0.023				1.17	0.43	1.05		2.67
232M1 SC038	Bhakuwa Nadi Ko Pul Bata Uttar Hudai Basantapatti Jane Bato	2	6,7	3.75					2.40				2.40
232M1 SC039	Snrtp Bata Khap Tol Hudai Pokwa Bam Nahar Samma	1289	7	4	0.026				1.13	0.73			1.88
232M1 SC040	Narkatiya Bata Ita U'dhyog Hudai Sekhauna Jodne Sadak	4360	7	3.75					1.51	0.41		0.09	2.01
232M1 SC041	Bangkul Simana Sadak	47	7	3					0.57				0.57
232M1 SC042	Basantapatti-Sekhauna	276	6	6					0.93				0.93
232M1 SC043	Basantapatti-Inarwari	1183	6	6					1.80				1.80
232M1 SC044	Bhediyaahi Bazaar-Pokhariya Damar Tole	5248	5	6			0.02		1.76				1.78
232M1 SC045	Rajpur Simana Bata Nahar Jodne Sadak	612	5	3					1.56				1.56

Road Code	Road Name	HH served	Ward Pass	Road width	Existing bridge	New bridge proposed	Culvert	BT	Earthen	Gravel	New	PCC	Grand Total
232M1 5C046	Pokhariya Damar-Nahar Jodne Sadak	1944	5	3					0.71		0.02		0.73
232M1 5C047	Laukaha-Pokhariya-Lal Bakaiya Badh	3977	3,4	3			0.02		1.49	1.37			2.88
232M1 5C048	Bijaya Sadak(Pokharia-Laukaha-Hulak Sadak-Bhedyahi Bazaar	1636	4,5	3					1.08				1.08
232M1 5C049	Tejapakad,Ramananda Ko Mill,Bata Paschim-Inarwari Jane Bato	2177	3	3					0.73				0.73
232M1 5C050	Jigadawa Belbichawa Bypass Road	3756	1	3.75					1.28				1.28

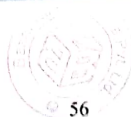
4.7 Summary of Road Class D

Table 12: List of Class D Roads

Road Code	Road Name	HH served	Ward Pass	Road width	Existing bridge	New bridge proposed	Culvert	BT	Earthen	Gravel	New	PCC	Grand Total
232M1 5D001	Ramdharko Ghar,Chadah Mandir Chowk-Bindasaha Sonarko Ghar-Bharatiya Simana Samma	2857	9	3					0.56				0.56
232M1 5D002	Hanuman Mandir Chowk Bata Purba Mul Sadak Jane Bato	2586	9	3					0.13				0.13
232M1 5D003	Rampur Bata Paschim Jane Sadak	2898	9	3					0.24				0.24
232M1 5D004	Wwada Karyalaya Bata Chhatghat Pokhari-Mansuri	3030	9	3					0.18				0.18
232M1 5D005	Rampur Chhatghat Dekhi Rampukar Sing Ko Khet Ra Binod Patel Ko Khet Hudai Mul Sadak Samm	1320	8,9	0						0.57			0.57
232M1 5D006	Culvert Bata Masjid Ko Dura-Bata Ram Pd Chauraisa Ko Ghar Bata Culvert Hudai Mul Sdak Jodne Bato	1402	8	3					0.27				0.27
232M1 5D007	Babulal Ko Ghar Dekhi Sikindar Pattel Ko Ghar Samma Jane Bato	1174	8	3.75					0.04				0.04

Road Code	Road Name	HH served	Ward Pass	Road width	Existing bridge	New bridge proposed	Culvert	BT	Earthen	Gravel	New	PCC	Grand	Total
222M1 SD008	Motipur Gaun, Birendra Patel Ko Ghar Hudai Uttar Jognai Ko Dura Hudai Purba Mul Sadak Jodne Bato	1640	8	3					0.34				0.34	
222M1 SD009	Sachindra Patel Ko Ghar Hudai Chunilala Ko Ghar - Jimdar Ko Dura Jane Bato	1522	8	3					0.15				0.15	
222M1 SD010	Ramnagar Math Dekhi Paschim	1421	5,8	0						1.88			1.88	
222M1 SD011	Mansik Raut Ko Ghar- Ramananda Ko Ghar Jane Bato	4426	8	3								2.17	0.17	
222M1 SD012	Ramananda Ko Ghar Jane Bato	4211	8	3.75					0.15				0.15	
222M1 SD013	Shekh Nathuni Ko Ghar Dekhi Uttar Bhola Neta Ko Ghar Samma	3999	8	3.75					0.08				0.08	
222M1 SD014	Mul Sadak Bata-Mansik Raut Ko Ghar Bata Dinesh Thakur Ko Ghar Hudai Pramod Raut Ko Ghar Jodne Sadak	4737	7,8	2					0.19				0.19	
222M1 SD015	Rajmarga Bata-Sheikh Dukha Ko Ghar -Satindar Ko Ghar Jane Bato	5184	7	3					0.30				0.30	
222M1 SD016	Sheikh Dukha Ko Ghar- Anawa Rul Dewan Ko Ghar	3206	7	2					0.19				0.19	
222M1 SD017	Narkatiya-Masaar Rautko Ghar Bata Laganshil Sahakari Jane Bato	3385	7	2					0.16				0.16	
222M1 SD018	Mul Sadak Bata Bharatiya Simana Jodne Sadak		7	3			0.01		0.34				0.35	
222M1 SD019	Hanuman Mandir Dekhi Ram Janaki Dharmasala Samma	1213	7	3.75					0.75				0.75	
222M1 SD020	Khap Tole Bata Janta Pr Abi Hudai Rajmarga Jodne Sadak	1289	7	4					0.63			2.27	0.91	
222M1 SD021	Ram Adhar Ko Ghar Dekhi Umesh Ko Ghar Samma	1257	7	3.75					0.12				0.12	
222M1 SD022	Canal Road	2604	4,5,6	2					3.68				3.68	
222M1 SD023	Basantapatti Nahar Chowk Dekhi Chaur Garaiya Hudai	1414	6	3.75					0.85				0.85	

Road Code	Road Name	HH served	Ward Pass	Road width	Existing bridge	New bridge proposed	Culvert	BT	Earthen	Gravel	New	PCC	Grand	Total
232M1 SD024	Bhediya-Sirifal Raut Ko Khet Hudai Basantapatti Simana	942	6	3					1.63				1.63	
232M1 SD025	Hari Chandra Sah Ko Ghar Batajai Govinda Ko Ghar Hudai Snrtp Sadak Samma	2782	6	3					0.17				0.17	
232M1 SD026	Anchit Prasad Ko Ghar Dekhi Jai Govinda Ko Ghar Hudai Snrtp Sadak Samma	2855	6	3.75					0.18				0.18	
232M1 SD027	Bhediya Naya Bato 1	1564	6	3						0.0	0.10		0.18	
232M1 SD028	Bhediya Naya Bato 2	102	6	0						0.15			0.15	
232M1 SD029	Babul Sah Ko Ghar Dekhi Nirgun Ko Khet Hudai Mul Sadak Samma	632	6	0						0.40			0.40	
232M1 SD030	Siudhari Mahto Ko Ghar Dekhi Bhirkhu Das Ko Ghar Samma	2627	6	3.75					0.08				0.08	
232M1 SD031	Ram Bilas Sah Ko Ghar Dekhi Uttar Hari Chandra Sah Ko Ghar Samma	2873	5,6	3.75					0.11				0.11	
232M1 SD032	Laxmi Sah Ko Ghar Dekhi Kapil Deo Ko Ghar Hudai Snrtp Sadak Samma	2164	5	3.75					0.16				0.16	
232M1 SD033	Paras Raut Ko Ghar Dekhi Rama Kant Ko Ghar Hudai Snrtp Sadak Jane	2809	5,6	3.75					0.23				0.23	
232M1 SD034	Badri Chowk- Uttar Namagada Hudai Ramsingh Patel Ko Ghar Jodne Sadak	4964	5	3					0.61		2.31		0.91	
232M1 SD035	Inus Ansari Ko Ghar Dekhi Snrtp Sadak Samma	1273	5	3.75					0.10				0.10	
232M1 SD036	Enus Ko Ghar Dekhi Paschim Jane Bato Ishrafi Ko Ghar Hudai Asin Ko Ghar Samma	1742	5	3.75					0.15				0.15	
232M1 SD037	Id Mohammad Ko Ghar Dekhi Paschim Snrtp Bata Snrtp Dekhi Paschim Namnagada Pra Vi	2160	5	3.75					0.12				0.12	



Road Code	Road Name	HH served	Ward Pass	Road width	Existing bridge	New bridge proposed	Culvert	BT	Earthern	Gravel	New	PCC	Grand	Total
232M1 SD038	Farmudko Ghar-Nahid Ansariko Ghar-Rajpur Simana Samma	2301	5	0							0.49		0.49	
232M1 SD039	Mohammed Sadik Ko Ghar Dekhi Purba Jane Rajpur Simana Samma	1908	5	3.75					0.47				0.47	
232M1 SD040	Mul Bato Mojahid Ko Ghar Dekhi Uttar Safad Dewan Ko Ghar Samma	1897	5	3.75					0.12				0.12	
232M1 SD041	Mul Bato Monib Ko Ghar Dekhi Uttar Jainoon Ko Ghar Samma	1958	5	3.75					0.09				0.09	
232M1 SD042	Masjid Dekhi Uttar Ishraf Ko Ghar Samma	2022	5	3.75					0.07				0.07	
232M1 SD043	Jalandhar Daktar Ko Ghar Bata Purba Bijaiya Jane Sadak	2427	4	6					0.36		0.20		0.56	
232M1 SD044	Basanpatti-Laukaha-Pokhariya	5334	4,6	3					1.28	0.20			1.48	
232M1 SD045	Bramha Jyoti Mandir Bata Dakshin Trasnfomer Chowk	2498	4	3					0.31				0.31	
232M1 SD046	Garib Saha Ko Ghar Dekhi Hari Ray Ko Khaliyan Samma	1954	4	3.75					0.11				0.11	
232M1 SD047	Bramajyoti Mandir Bata Purba Rajdev Shah Ko Pasal Jodne Sadak	2331	4	3					0.20				0.20	
232M1 SD048	Mahendra Jyoti Ko Ghar Deki Birnda Ray Ko Ghar Samma	2086	4	3.75					0.09				0.09	
232M1 SD049	Ram Agaiya Yadav Ko Ghar Dekhi Raj Mangal Ko Ghar Samma	2108	4	3.75					0.07				0.07	
232M1 SD050	Bishwanath Ko Ghar Dekhi Ram Chandra Ko Ghar Samma	1969	4	3.75					0.05				0.05	
232M1 SD051	Laukaha Bhitri Sadak	2925	4	3.75					0.24				0.24	
232M1 SD052	Moti Rahaman Ko Ghar Dekhi Masjid Samma	1892	4	3.75					0.05				0.05	
232M1 SD053	Laxman rautko ghar bata- uttar purba -shekg samsul ko jane sadak	600	4	3					0.43				0.43	



Road Code	Road Name	HH served	Ward No.	Road width	Existing bridge	New bridge proposed	Culvert	BT	Earthwork	Gravel	Non	PCC	Gravel	Total
232M1 SD054	Milat Pra Vi Bata Lazman Raut Ghar Samma	2575	4	3.75					0.30					0.30
232M1 SD055	Milat School Bat Purba Pani Tanki Hudai Madarsa Jane Bato	2282	4	3.75					0.26					0.26
232M1 SD056	Mul Sadak Yar Muhammed Ko Ghar Dekhi Madarsa Jane Bato	1986	4	3.75					0.14					0.14
232M1 SD057	Pokhariya Ghadariya Tole- Bata Paschim Sheikh Samsul Ko Ghar Jane Sadak	2998	4	3					0.80					0.80
232M1 SD058	Dhopkat Dekhi Marwa Ko Rukh Hudai Ghadariya Jane Batoko Chowk Samma	347	4	3.75					0.30					0.30
232M1 SD059	Ghadari Dekhi Pokhariya Jane Mod Samma	606	4	3.75					0.30					0.30
232M1 SD060	Mul Sadak Pokhariya Tol Bata Purba Lal Bakaiya Badh Jane Sadak	2132	3,4	3						6				0.66
232M1 SD061	Ablesh Sheth Ko Ghar Dekhi Paschim Jane Bato Sundar Shako Ghar Samma	1907	4	3.75					0.26					0.26
232M1 SD062	Mul Bato Rajindra Shah Ko Ghar Dekhi Shekh Taiyab Ko Khaliyan Samma	1969	4	3.75					0.15					0.15
232M1 SD063	Jogindar Thakur Bari Dekhi State Boarding Jane Bat	1684	4	3.75					0.06					0.06
232M1 SD064	Ram Jaan Ko Ghar Dekhi Uttar State Boarding School Hudai Tulsai Ray Ko Ghar Samma	2949	4	3.75					0.39					0.39
232M1 SD065	Babu Jaan Ko Ghar Dekhi Purba Masjid Jane Bato	2313	4	3.75					0.17					0.17
232M1 SD066	Pokhariya Gahatol Bata Purba Purwa Badh Jane Sadak	1865	3,4	3.5			0.01		0.17					0.18
232M1 SD067	Bilasi Roy Ko Ghar Dekhi Sabir Hajra Ko Ghar Samma	2102	4	3					0.22					0.22
232M1 SD068	Dharmendra Prasad Ko Ghar Dekhi Ma Bi Basantapatti Samma	1958	4	3.75					0.20					0.20

Road Code	Road Name	HH served	Ward Pass	Road width	Existing bridge	New bridge proposed	Culvert	BT	Earthen	Gravel	New	PCC	Grand	Total
232M1 SD069	Hari Shankar Ray Ko Ghar Dekhi Raghunath Ray Ko Ghar Samma	2216	4	2					0.14				0.14	
232M1 SD070	Umarbin Ulkhatah Masjid Jane Bato	2164	3,4	0						0.22			0.22	
232M1 SD071	Mul Sadak Bata Purba Dakshin Hudai Sano Kabrastan Jane Sadak	2343	4	3					0.35				0.35	
232M1 SD072	Shekh Ablesh Hatawa Ko Ghar Dekhi Ishrapu Ko Ghar Hudai Shekh Gafur Ko Ghar Samma	2194	4	3.75					0.07				0.07	
232M1 SD073	Toshi Akhtar Ko Ghar Dekhi Jamil Akhtar Ko Ghar Samma	2114	4	3.75					0.08				0.08	
232M1 SD074	Basantapatti-Sekhauna	2661	6	5			0.02		0.28				0.30	
232M1 SD075	Basantapatti Naya Bato I	989	6	0						0.52			0.52	
232M1 SD076	Basantapatti Naya Bato I	1759	6	0						0.19			0.19	
232M1 SD077	Indar Dev Raut Ko Ghar Dekhi Hari Narayan Ko Ghar Hudai Ra Jai Mangal Ko Ghar Hudai Mogal Raut Ko Ghar Samma	1352	6	3.75					0.17				0.17	
232M1 SD078	Basantapatti Mab I Ko Pokhari Jane Bato	1689	6	3.75					0.08				0.08	
232M1 SD079	Tejapakad Aa Bi Dekhi Baiju Singh Ko Khet Hudai Samsul Ko Ghar Samma	2911	3	9					0.78				0.78	
232M1 SD080	Rajendra Pd Ko Ghar Bata Purba Banarasi Pd Ko Ghar	2452	6	2					0.15				0.15	
232M1 SD081	Kedar Jasiwal Ko Ghar Bata Uttar Purba Hudai Banarasi Pd Ko Ghar	2035	6	3					0.25				0.25	
232M1 SD082	Bhediya-Basantapatti-Inarwari-Pataura	3541	6	6			0.01		0.53				0.54	
232M1 SD083	Babisaheb Ko Ghar Bhar Bata Dakshin Bramhthanmandir Jane Sadak	2533	6	3					0.23				0.23	

Road Code	Road Name	HH served	Ward Pass	Road width	Existing bridge	New bridge proposed	Canal	BT	Earthwork	Gravel	New	PCC	Grand	Total
232M1 5D084	Basantapatti Gaun Nul Sadak Bata Dakshin Kedar Jaiswal Ko Ghar	2072	6	3					0.09				0.09	
232M1 5D085	Tejapakad Bata Paschim Jane Naya Sadak		6	0						0.67			0.67	
232M1 5D086	Tejapakad Baiju Singh Khet Dekhi Paschim Haraiya Inarwari Jane Sadak	606	3.6	3					0.74				0.74	
232M1 5D087	Tejapakad Aa Bi Dekhi Baiju Singh Ko Khet Hudai Samsul Ko Ghar Samma	1512	3	3					0.12				0.12	
232M1 5D088	Bhagat Ko Ghar-Mukesh Ko Ghar-Jalandhar Ko Ghar	3293	3	2					0.24				0.24	
232M1 5D089	Shekh Shahid Ko Ghar Bata Paschim Sahakari Jane Bato	2341	3	2					0.27				0.27	
232M1 5D090	Eampd Paswan Ko Ghar Hudai Dakshin Sheikh Shahi Ko Ghar Jodne Bato	3866	3	3					0.30				0.30	
232M1 5D091	Ram Pd Paswan Ko Ghar Bata Dakshin Pashim Bata Jayprakash Paswan Ko Ghar Jane Bato	3954	3	3					0.36				0.36	
232M1 5D092	Tejapakad Dekhi Uttar Jyutahi Jane Bato	858	3	3					0.47				0.66	
232M1 5D093	Moktar Ko Ghar Bata Dakshin Madarsa Jane Sadak	1670	3	3					0.39				0.39	
232M1 5D094	Laukaha Bata Uttar Moktar Ko Ghar Jane Sadak	1801	3	3					0.49				0.49	
232M1 5D095	Koktar Ko Ghar Bata Purba Lalbakiya Badh Jane Sadak	1104	3	3.75					0.25				0.25	
232M1 5D096	Musahartol Road	136	2	3.75					0.10				0.10	
232M1 5D097	Bramasthan Mandri Dekhe Purba Ram Ashre Mahato Ko Ghar Samma	2050	1	0						0.06			0.06	
232M1 5D098	Ram Suresh Ko Ghar Dekhi Paschim Shekh Mati Ullahako Ghar Samma	1729	2	3.75					0.45	0.09			0.54	
232M1 5D099	Radhe Shyam Ko Ghar Ko Mod Bata Rama Kanta Ko Khet Hudai Paschi Nageshwor Nath Mandir Samma	1638	2	0						0.12			0.12	



Road Code	Road Name	HH served	Ward Pys	Road width	Existing bridge	New bridge proposed	Culvert	BT	Earthen	Gravel	New	PCC	Grand	Total
222M1 SD100	Bidhyanand Shah Ko Ghar Bata Paschim Bramhathan Mandir Hudai Ramchandra Giriko Ghar Jane Sadak	2908	2	5					0.60					0.60
222M1 SD101	Lalbakaiya Badh Bata Purba Kamdehi Nadi Jane Bato	413	1,2	3.75					0.83					0.83
222M1 SD102	Sukhadi Ko Ghar Dekhi Purba Bypass Sadak Jane Bato	3646	1,2	3.75					0.92					0.92
222M1 SD103	Jamir Akhtar Ko Ghar Bata Nahar Ko Culvert Hudai Dakshin Nanak Maharko Ghar Jodne Sadak	3568	2	3.75			0.00		0.24					0.25
222M1 SD104	Darbariya Kopasal Dekhi Jadha Shah Ko Ghar Jodne Sadak	4366	2	3.75					0.52					0.52
222M1 SD105	Jadha Shah Ko Ghar Bata Nahar Jodne Sadak	200	2	0						0.25				0.25
222M1 SD106	Darbariya Ko Pasal Bata Bata Purba Hospital	4667	1,2	3.75					0.42					0.42
222M1 SD107	Samin Ko Ghar Hudai Purba Bypass Sadak	4435	1,2	3.75					0.32					0.32
222M1 SD108	Sakir Mukhiya Ko Ghar Dekhi Paschim Kasim Ko Ghar Samma	3538	2	3.75					0.04					0.04
222M1 SD109	Latif Ko Dokan Dekhi Purba Chamar Toli Dekhi Dakshin Hudai Ram Ekbal Ko Gachi Samma	4039	1	0						0.23				0.23
222M1 SD110	Ramlal Ko Ghar Bata Rajai Ko Ghar Jodne Sadak	4188	1	3.75					0.23					0.23
222M1 SD111	Salim Ahamed Ko Ghar - Daskhin Purba Hudai Rajai Ko Ghar	4795	1	3.75					0.26					0.26
222M1 SD112	Jafir Ahmad Ko Ghar-Ramalal Ko Ghar Hudai Purba Jane Sadak	3643	1	3.75					0.26					0.26
222M1 SD113	Mul Sadak Sali Muhammad Ko Ghar Dekhi Dakshin Hamid Ko Ghar Hudai Purba Jane Bato	3873	1	3.75					0.07					0.07

Road No.	Road Name	HH served	Ward	Pass	Road width	Existing bridge	New bridge proposed	Culvert	BT	Earthen	Gravel	New	PCC	Grand	Total
2014	Shekh Dinaliko Ghar Dekhi Purba Baraila Tol Hudai Ram Lal Ko Ghar Samma	3959	1	3.75						0.09				0.09	
2015	Masjid Dekhi Paschim Shekh Hussain Ko Ghar Dekhi Uttar Mul Sadak Jane Bato	3759	2	3.75						0.12				0.12	
2016	Shekh Rakib Ko Ghar Dekhi Uttar Shekh Ekramun Ko Ghar Samma	4391	2	3.75						0.10				0.10	
2017	Nuniya Tole Road	2026	1	3.75						0.20				0.20	
2018	Mul Sadak Muslim Ko Ghar Hudai Rudhal Baitha Samma	2336	1	3.75						0.20				0.20	
2019	Falahull Muslimin Madarsa Dekhi Purba Nuniya Tol Hudai Mul Sadak Jane Bato	1967	1	0							0.69			0.69	

1.8 Municipality Inventory Map of Road Network

Road inventory survey was conducted through the municipality as far as possible except the new construction considered. In the inventory survey, the surface condition, width of road, and intervention required were collected. These data are presented in municipality inventory map of road by surface condition, by width and invention needed. Similarly, the map of road infrastructure is also prepared. Refer annex of this report for map in detail.

Table 13: Present Road Condition

Road Type	Municipality Roads	SRN Roads	DRCN	Grand Total
Metalled	1.41	-		1.41
Earthen	104.87	-	4.89	109.76
Gravel	13.80	14.15		27.95
Total	120.08	14.15	4.89	139.12



Table 14: Summary of Different Road Classification and Planning for new Road

Road Type for the Construction Work	Base year(2017/2018)				
	Earthen	Gravelled	Blacktop	New Construction	Total
Class "A" Roads	0.85		-	-	0.85
Class "B" Roads	19.36	6.41	1.41	-	27.18
Class "C" Roads	48.25	6.25	-	2.25	56.75
Class "D" Roads	24.94	1.14	-	0.49	26.57
RCN	4.89		-	-	4.89
SPN	-	14.13		-	14.13
Total	98.29	27.93	1.41	2.74	130.37



CHAPTER 5: Perspective Plan of Municipal Transport Network

5.1 Process and Procedure for collecting demands from wards

Ward level meeting were held in each wards and demand forms were filled as per the demand and priority of the local people. From the discussion held in wards, various demands of people regarding requirement or upgrading of infrastructures were listed out and were prioritized. The hearings from public play a major role in planning the transportation network in future.

Data Analysis and Field Verification of the Roads from Demand Form

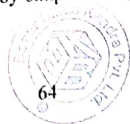
Analysis of data regarding the accessibility situation in each settlement, population forecasting for each sector, major road linkages will be done. Similarly, all the roads demanded in demand form are verified in field by the survey team.

5.2 Scoring System for Screening, Grading and Prioritization

Development of the scoring criteria and prioritization criteria based on the provided guidelines are prepared and its approval from the municipality and MRCC is done.

Transport linkage in an urban area has greater importance for its overall development. The development of road transport linkages to each plot of land or each residential unit is ideal approach for transport planner. Various types of land use pattern require different category of road transport linkage. The development of road linkage requires tremendous amount of public fund. However, the public authorities don't have adequate amount of funding. Therefore, a prioritization approach should be adopted for the rational allocation of limited funds for the construction, maintenance and rehabilitation of various categories of road linkage. Conventionally, each construction or maintenance projects are justified on the basis of cost-benefit ratio. This conventional approach disregards the benefit due to non-monetary aspects of the transport projects. Therefore, a multi-criteria approach for the selection of transport linkage is adopted as an justified approach for the project selection.

A network consists of several links. It is not possible to construct all roads at a time due to resource gap, time constraint and limited management capacity. Therefore, each link in a network should be prioritized. Each road link is then allocated the number of points corresponding to the fulfillment of the particular criteria. The aggregate number of points that each intervention receives is computed by simple adding the points allocated per indicator.



The result of this process leads to a ranking of the investment options. The following criteria are used for prioritization of new transport linkages:

Table 15: Criteria for Prioritization

S.N.	Criteria	Scoring Unit	Score
1	Link providing service to large settlement areas/population	Population served/km	30
2	Link providing service to existing Service centers, a) Recreation b) Agriculture c) Market Centre d) Service Centre	Discretely based on existence. Each facility is given 25% weightage.	40
3	Ward Demand	P1- 20 P2-16 P3- 12 P4-8 P5-4 Others: 2	20
4	Linkages with other transport Linkages	National Highway- 10 Feeder Road- 8 District Road- 6 Neighboring Municipality/District-4	10
Total			100

These criteria are described in brief below:

1. Population Served

Population served by the road link is one of the important indicator of prioritization. Higher the population served by the road, higher will be its necessity or importance. Thus, such road need to be upgraded/maintained/constructed first. Scoring is done relatively. Highest score is assigned for the road link serving highest population and is relatively reduced. Thus the score for road based on population served lies within zero to full score.

2. Access to services and facilities

It is one of the main governing prioritization indicator as it outlines the specific services provided to the locals. The road link may provide access to Recreation (picnic spot, historical

place, park, cinema hall, and playground). Agricultural land, Market center and Service center (School, Health Centers, government offices etc.). A single road link can serve just a single function or more function. The proposed road interventions which serves all four facilities has higher importance and given highest score. Each facility is given 25% weightage. Thus a road link serving all four facilities will get full score and the road link serving three facilities will get 75 % and so on.

3. Demand Priority of wards

It is one of the important criteria of prioritization. Demand with priority order was collected from each ward during field surveys. These priorities are based on present need as perceived by the locals. Higher the priority of intervention, higher is the score share. Thus if a road intervention received first priority in any ward, then it will get full marks. Road with corresponding priority are scored accordingly, score is reduced by 20% for each lower level priority, ie second priority will receive 80% score and so on, 5th prioritized road will receive 20% score. Other remaining roads will receive score equivalent to 10% of total.

4. Linkages with other transport linkages

It is also one of the criteria for prioritization. Road linkages reflects the importance of the road in the municipality. Road linking with higher class road will be more important and immediate the intervention required. Road linking with National highways will receive full score. Road linking with feeder road will receive 80% score and road linking with district road will receive 60% score. Similarly road linking with neighboring district or municipal will receive 40% score and remaining others road will be scored zero.

5.3 Possible Inter-Municipality/District Linkage

In this municipality, there are some roads which in future will be possible inter-district link roads. After completing the target of planned roads, there will be good transport facilities for the people of this municipality. Municipality should give priority for constructing the planned road which will be inter-district linkage and DTMP/MTMP should be updated regularly.

5.4 Perspective Plan of Municipal Transport Network with Respective Score and Ranking

Perspective plan of the Municipality is the development plan that includes the plan of development of all roads hierarchy within the Municipality. MTMP is short term Municipality Transportation Master Plan generally of 5 years which includes the prioritized road demands whereas perspective plan is a long term plan which includes the overall road demand of the Municipality.

Perspective plan identifies all the infrastructure demands of the Municipality. The proposed road networks and road infrastructure will help to enhance the overall transportation network of the Municipality which will eventually result in increased accessibility and mobility. The visionary development plan i.e. the municipal development plan will help to develop other sectors of the Municipality along with the development of transportation sector. The well facilitated and well connected road will facilitate safe, comfortable and efficient trips to the road user. Moreover increase in transportation facility will help to boost the economic development of that particular Municipality which will eventually contribute to overall economic development of the nation.

The first five year financial plan is prepared based on the assumption that the each year budget will increase by 10% from previous year budget. All the roads included in perspective plan along with their score, rank and class are given below:

Table 16: List of Road for Municipality Perspective Plan

Road Class	Road Code	Road Name	Ward Pass	Total Score	Rank
B	232M15B014	Bhediya-Basantapatti	5,6	74	1
C	232M15C044	Bhediya Bazaar-Pokhariya Damar Tole	5	72	2
B	232M15B019	Tejapakad-Laukaha-Pokhariya	3,4	70	3
C	232M15C017	Basantapatti Ma Bi To Madan Shah Ko Ghar Samma	3,6	69	4
C	232M15C037	Namnagada Bata Paschim Motopur Jane Bato	5,8	66	5
C	232M15C014	Narkatiya- Gaun Bata-Idagah Bata Bharatiya Simana Samma	7,8	63	6
C	232M15C027	Pokhariya Ghadari-Jigadawa Belbichawa	1,2,3	63	7
D	232M15D082	Bhediya-Basantapatti-Inarwari-Pataura	6	60	8
D	232M15D034	Badri Chowk- Uttar Namagada Hudai Ramsingh Patel Ko Ghar Jodne Sadak	5	55	9
B	232M15B010	Sukdev Chowk -Jarlnel Ko Ghar Bata Nahar Hudai Badh Jane Sadak	1,2,3	53	10
D	232M15D015	Rajmarga Bata-Sheikh Dukha Ko Ghar -Satindar Ko Ghar Jane Bato	7	53	11
D	232M15D044	Basanpatti-Laukaha-Pokhariya	4,6	53	12
D	232M15D001	Ramdharko Ghar,Chadah Mandir Chowk-Bindasaha Sonarko Ghar-Bharatiya Simana Samma	9	52	13
C	232M15C050	Jigadawa Belbichawa Bypass Road	1	51	14
C	232M15C040	Narkatiya Bata Ita Udhog Hudai Sekhauna Jodne Sadak	7	50	15

Road Class	Road Code	Road Name	Ward Pass	Total Score	Rank
B	232M15B006	Mul Sadak Bata Wada 8 Ko Karyalaya Hudai Bhakuwa Khola Hudai Rajmarga Jodne Sadak	7,8	46	16
C	232M15C047	Laukaha-Pokhariya-Lal Bakaiya Badh	3,4	45	17
C	232M15C001	Jugul Rautko Ghar-Prithvi Narayan Rautko Ghar Bata Kabrasthan Jane Bato	9	44	18
C	232M15C030	Jingadawa Nimab Bata Paschim-Nanak Mahara Ko Ghar Hudai Badh Samma Sadak	2	44	19
B	232M15B004	Khap - Badimasjid-Mansari	9	42	20
D	232M15D014	Mul Sadak Bata-Mansik Raut Ko Ghar Bata Dinesh Thakur Ko Ghar Hudai Pramod Raut Ko Ghar Jodne Sadak	7,8	41	21
B	232M15B005	Narkatiya Bata Nahar Ko Culvert Bata Bharatiya Simana Jane Bato	8	40	22
D	232M15D024	Bhediya-Sirifal Raut Ko Khet Hudai Basantapatti Simana	6	39	23
D	232M15D025	Hari Chandra Sah Ko Ghar Batajai Govinda Ko Ghar Hudai Snrtp Sadak Samma	6	38	24
C	232M15C038	Bhakuwa Nadi Ko Pul Bata Uttar Hudai Basantapatti Jane Bato	6,7	36	25
D	232M15D011	Mansik Raut Ko Ghar-Ramananda Ko Ghar Jane Bato	8	35	26
D	232M15D019	Hanuman Mandir Dekhi Ram Janaki Dharmasala Samma	7	35	27
C	232M15C048	Bijaya Sadak(Pokharia-Laukaha-Hulak Sadak-Bhediya Bazaar	4,5	34	28
B	232M15B007	Tejapakad-Lal Bakaiya-Jingadawa Belichawa	2,3	33	29
C	232M15C021	Shiva Mandir Chowk Bata Jalandhar Ko Ghar Hudai Uttar Baudimai Chowk	3	33	30
D	232M15D022	Canal Road	4,5,6	32	31
C	232M15C046	Pokhariya Damar-Nahar Jodne Sadak	5	32	32
C	232M15C013	Purano Bazaar-Bramhathan Bata Uttar Hudai Mul Sadak Jodne Sadak	7,8	31	33
A	232M15A001	Bhediya-Laukaha-Pokhariya	4	30	34
D	232M15D106	Darbariya Ko Pasal Bata Bata Purba Hospital	1,2	30	35
C	232M15C009	Rampur-Idgaha Bata Bharat Simana Samma	9	30	36
D	232M15D012	Ramananda Ko Ghar Jane Bato	8	29	37
C	232M15C011	Bhakuwa Khola Jholunge Pul Isanath Napa Ko Simana Sadak	5,8	29	38
C	232M15C025	Pokharriya Damar Bata Ita Bhatta Hudai Laukaha Jane Sadak	4,5	29	39



Road Class	Road Code	Road Name	Ward Pass	Total Score	Rank
B	232M15B015	Bhediyahi-Bata Purba Wada 4 Ko Simana Samma Ko Sadak	4,5,6	29	40
B	232M15B009	Sukdev Chowk Bata Purba Highway Jodne Mul Sadak Belbichawa	1	28	41
C	232M15C033	Bipat Ko Ghar - Uttar Purba Hudai Bheiyahai Simana Sadak	1	28	42
C	232M15C002	Swastha Chowki Bata Panitanki Chowk Bata Dasgaja	9	28	43
D	232M15D033	Paras Raut Ko Ghar Dekhi Rama Kant Ko Ghar Hudai Snrtp Sadak Jane	5,6	28	44
B	232M15B008	Bhediyahi -Tejapakad	3,4,6	28	45
D	232M15D020	Khap Tole Bata Janta Pr Abi Hudai Rajmarga Jodne Sadak	7	27	46
D	232M15D038	Farmudko Ghar-Nahid Ansariko Ghar-Rajpur Simana Samma	5	27	47
C	232M15C012	Rampur Bata-Narkatiya Jane Bato	8	27	48
C	232M15C043	Basantapatti-Inarwari	6	27	49
C	232M15C032	Sukhadi Ko Ghar Bata Paschim Jamir Akhtar Ko Ghar Hudai Nahar Ko Culvert Jodne Sadak	2	27	50
C	232M15C020	Tejapakad Chowk-Bramhathan- Baudimai Chowk	3	26	51
C	232M15C028	Jhingdwa Aa Bi To Purba Jane Kamdehi Nadi Hudai Main Road Jane	1	26	52
C	232M15C004	Boudimai ko mandir bata purba uttar hudai Bikhadas tatma ko ghar jane bato	9	25	53
D	232M15D004	Wwada Karyalaya Bata Chhatghat Pokhari-Mansuri	9	25	54
B	232M15B012	Narkatiya Purbari Madarsa To Chhath Ghat	7	25	55
C	232M15C045	Rajpur Simana Bata Nahar Jodne Sadak	5	24	56
C	232M15C035	Jidagawa Belbichawa Bata Masahartol Jane Bato	1,2,3	24	57
C	232M15C039	Snrtp Bata Khap Tol Hudai Pokwa Bam Nahar Samma	7	24	58
C	232M15C008	Rampur Gaun Jugal Raut Ko Ghar Bata Hanuman Mandir Bata Dasgaja	9	24	59
D	232M15D026	Anchit Prasad Ko Ghar Dekhi Jai Govinda Ko Ghar Hudai Snrtp Sadak Samma	6	23	60
D	232M15D002	Hanuman Mandir Chowk Bata Purba Mul Sadak Jane Bato	9	23	61
B	232M15B013	Lalbakaiya Badh Hudai Malhiniya Jane Sadak	1,2,3	23	62
D	232M15D010	Ramnagar Math Dekhi Paschim	5,8	23	63

Road Class	Road Code	Road Name	Ward Pass	Total Score	Rank
D	232M15D074	Basantapatti-Sekhauna	6	22	64
B	232M15B001	Khap Bata Purba Dakshin Simana Hudai Bharatiya Simana Samma	9	22	65
D	232M15D103	Jamir Akhtar Ko Ghar Bata Nahar Ko Culvert Hudai Dakshin Nanak Maharko Ghar Jodne Sadak	2	22	66
B	232M15B002	Raj Devi Mandir To Chhath Ghat Hudai Mansari Road Samma	9	21	67
B	232M15B020	Jidagawa belbichawa bata Uttar Falahull Muslimin Madarsa hudai dewahi gonahi na pa jane sadak	1	21	68
D	232M15D104	Darbariya Kopasal Dekhi Jadha Shah Ko Ghar Jodne Sadak	2	21	69
D	232M15D111	Salim Ahamed Ko Ghar -Daskhin Purba Hudai Rajai Ko Ghar	1	21	70
B	232M15B017	Battery Company Bata Purba Pokhariya Gahatoli Sadak	4,6	20	71
D	232M15D037	Id Mohammad Ko Ghar Dekhi Paschim Snrpt Bata Snrtp Dekhi Paschim Namnagada Pra Vi	5	20	72
C	232M15C036	Canal Road	7,8,9	20	73
D	232M15D039	Mohammed Sadik Ko Ghar Dekhi Purba Jane Rajpur Simana Samma	5	19	74
D	232M15D008	Motipur Gaun,Birendra Patel Ko Ghar Hudai Uttar Jognai Ko Dura Hudai Purba Mul Sadak Jodne Bato	8	19	75
D	232M15D003	Rampur Bata Paschim Jane Sadak	9	19	76
D	232M15D107	Samin Ko Ghar Hudai Purba Bypass Sadak	1,2	19	77
C	232M15C007	Sofi Mahat Ko Ghar Bata Purba Sikhardas Ko Ghar Hudaidakshinwari Tole-Rajdevi Mandir	9	19	78
D	232M15D116	Shekh Rakib Ko Ghar Dekhi Uttar Shekh Ekramun Ko Ghar Samma	2	19	79
C	232M15C010	Mul Sadak Bata Wada Simana Hudai Bharatiya Simana Jane Bato	9	19	80
D	232M15D093	Moktar Ko Ghar Bata Dakshin ,Madarsa Jane Sadak	3	19	81
D	232M15D006	Culvert Bata Masjid Ko Dura- Bata Ram Pd Chauraisa Ko Ghar Bata Culvert Hudai Mul Sdak Jodne Bato	8	18	82
D	232M15D079	Tejapakad Aa Bi Dekhi Baiju Singh Ko Khet Hudai Samsul Ko Ghar Samma	3	18	83



Road Class	Road Code	Road Name	Ward Pass	Total Score	Rank
D	232M15D100	Bidhyanand Shah Ko Ghar Bata Paschim Bramhathan Mandir Hudai Ramchandra Giriko Ghar Jane Sadak	2	18	84
D	232M15D110	Ramlal Ko Ghar Bata Rajai Ko Ghar Jodne Sadak	1	18	85
D	232M15D027	Bhediya Naya Bato 1	6	18	86
C	232M15C042	Basantapatti-Sekhauna	6	18	87
C	232M15C026	Pokharia Damar--Lalbakaiya Badh Jane Sadak	3	18	88
B	232M15B016	Pokhariya Damar Bata Uttar-Pokhariya Mandir	3,4	18	89
C	232M15C005	Rampur,Dakshinwari Tole Bata Damar Hudai Rajpur Jane Bato	9	18	90
C	232M15C016	Bhediyanhi,Satinder Patel Ko Ghar Bata Paschim Motipur Jane Bato	5	18	91
D	232M15D109	Latif Ko Dokan Dekhi Purba Chamar Toli Dekhi Dakshin Hudai Ram Ekbal Ko Gachi Samma	1	18	92
D	232M15D013	Shekh Nathuni Ko Ghar Dekhi Uttar Bhola Neta Ko Ghar Samma	8	18	93
D	232M15D023	Basantapatti Nahar Chowk Dekhi Chaur Garaiya Hudai	6	18	94
D	232M15D114	Shekh Dinaliko Ghar Dekhi Purba Baraila Tol Hudai Ram Lal Ko Ghar Samma	1	17	95
D	232M15D091	Ram Pd Paswan Ko Ghar Bata Daskhin Pashim Bata Jayprakash Paswan Ko Ghar Jane Bato	3	17	96
D	232M15D113	Mul Sadak Sali Muhammad Ko Ghar Dekhi Dakshin Hamid Ko Ghar Hudai Purba Jane Bato	1	17	97
D	232M15D090	Eampd Paswan Ko Ghar Hudai Daskhin Sheikh Shahi Ko Ghar Jodne Bato	3	17	98
D	232M15D083	Babisaheb Ko Ghar Bhar Bata Dakshin Bramhthanmandir Jane Sadak	6	17	99
D	232M15D115	Masjid Dekhi Paschim Shekh Hussain Ko Ghar Dekhi Uttar Mul Sadak Jane Bato	2	17	100
C	232M15C018	Pokhariya Sabik Ward 9 To Paschim Battery Factory Hudai Gramin Sakakari Chowk	6	17	101
C	232M15C022	Pokhariya Ram Janaki Math Dekhi Badh Samma	3	17	102
C	232M15C034	Jigadawa Belbichawa-Musaharitol	1	17	103
C	232M15C003	Khap Tole bata Bikhardas Tatma Ko Ghar Samma Bato	9	16	104
D	232M15D102	Sukhadi Ko Ghar Dekhi Purba Bypass Sadak Jane Bato	1,2	16	105
D	232M15D112	Jafir Ahmad Ko Ghar-Ramalal Ko Ghar Hudai Purba Jane Sadak	1	16	106

Road Class	Road Code	Road Name	Ward Pass	Total Score	Rank
D	232M15D089	Shekh Shahid Ko Ghar Bata Paschim Sahakari Jane Bato	3	16	107
D	232M15D108	Sukir Mukhiya Ko Ghar Dekhi Paschim Kasim Ko Ghar Samma	2	16	108
D	232M15D057	Pokhariya Ghadariya Tole-Bata Paschim Sheikh Samsul Ko Ghar Jane Sadak	4	16	109
C	232M15C049	Tejapakad,Ramananda Ko Mill,Bata Paschim-Inarwari Jane Bato	3	15	110
D	232M15D017	Narkatiya-Masaar Rautko Ghar Bata Laganshil Sahakari Jane Bato	7	15	111
D	232M15D067	Bilasi Roy Ko Ghar Dehki Sabir Hajra Ko Ghar Samma	4	15	112
C	232M15C024	Pokhariya Ghadari-Sheikh Abulesh Ko Ghar Hudai Uttar-Lala Bakaiya Badh Jane Sadak	3,4	15	113
D	232M15D088	Bhagat Ko Ghar-Mukesh Ko Ghar-Jalandhar Ko Ghar	3	15	114
D	232M15D016	Sheikh Dukha Ko Ghar-Anawa Rul Dewan Ko Ghar	7	15	115
D	232M15D094	Laukaha Bata Uttar Moktar Ko Ghar Jane Sadak	3	14	116
B	232M15B003	Mul Sadak Bata Mansuri Simana Sadak	8,9	14	117
D	232M15D009	Sachindra Patel Ko Ghar Hudai Chunilala Ko Ghar -Jimdar Ko Dura Jane Bato	8	14	118
D	232M15D098	Ram Suresh Ko Ghar Dekhi Paschim Shekh Mati Ullahako Ghar Samma	2	14	119
D	232M15D064	Ram Jaan Ko Ghar Dekhi Uttar State Boardin School Hudai Tulsi Ray Ko Ghar Samma	4	14	120
B	232M15B011	Sheikh Id Ko Pokhari Bata Uttar-Shekh Islam Ko Krishi Farm Jodne Sadak	3,6	14	121
D	232M15D051	Laukaha Bhitri Sadak	4	13	122
D	232M15D099	Radhe Shyam Ko Ghar Ko Mod Bata Rama Kanta Ko Khet Hudai Paschi Nageshwar Nath Mandir Samma	2	13	123
D	232M15D031	Ram Bilas Sah Ko Ghar Dekhi Uttar Hari Chandra Sah Ko Ghar Samma	5,6	13	124
D	232M15D005	Rampur Chhatghat Dekhi Rampukar Sing Ko Khet Ra Binod Patel Ko Khet Hudai Mul Sadak Samm	8,9	13	125
D	232M15D030	Siudhari Mahto Ko Ghar Dekhi Bhirkhu Das Ko Ghar Samma	6	12	126
D	232M15D054	Milat Pra Vi Bata Laxman Raut Ghar Samma	4	12	127
D	232M15D018	Mul Sadak Bata Bharatiya Simana Jodne Sadak	7	12	128



Road Class	Road Code	Road Name	Ward Pass	Total Score	Rank
D	232M15D045	Bramha Jyoti Mandir Bata Dakshin Trasnfomer Chowk	4	12	129
D	232M15D080	Rajendra Pd Ko Ghar Bata Purba Banarasi Pd Ko Ghar	6	12	130
D	232M15D043	Jalandhar Daktar Ko Ghar Bata Purba Bijaiya Jane Sadak	4	11	131
D	232M15D071	Mul Sadak Bata Purba Dakshin Hudai Sano Kabrastan Jane Sadak	4	11	132
D	232M15D118	Mul Sadak Muslim Ko Ghar Hudai Rudhal Baitha Samma	1	11	133
D	232M15D047	Bramajyti Mandir Bata Purba Rajdev Shah Ko Pasal Jodne Sadak	4	11	134
D	232M15D065	Babu Jaan Ko Ghar Dekhi Purba Masjit Jane Bato	4	11	135
D	232M15D055	Milat School Bat Purba Pani Tanki Hudai Madarsa Jane Bato	4	11	136
D	232M15D069	Hari Shankar Ray Ko Ghar Dekhi Raghunath Ray Ko Ghar Samma	4	11	137
D	232M15D072	Shekh Ablesh Hatawa Ko Ghar Dekhi Ishrapu Ko Ghar Hudai Shekh Gafur Ko Ghar Samma	4	11	138
D	232M15D070	Umarbin Ulkhatah Masjid Jane Bato	3,4	10	139
D	232M15D032	Laxmi Sah Ko Ghar Dekhi Kapil Deo Ko Ghar Hudai Snrtp Sadak Samma	5	10	140
D	232M15D092	Tejapakad Dekhi Uttar Jyutahi Jane Bato	3	10	141
D	232M15D060	Mul Sadak Pokhariya Tol Bata Purba Lal Bakaiya Badh Jane Sadak	3,4	10	142
D	232M15D073	Toshi Akhthar Ko Ghar Dekhi Jamil Akhatar Ko Ghar Samma	4	10	143
D	232M15D049	Ram Agaiya Yadav Ko Ghar Dekhi Raj Mangal Ko Ghar Samma	4	10	144
D	232M15D048	Mahendra Jyoti Ko Ghar Deki Birnda Ray Ko Ghar Samma	4	10	145
D	232M15D084	Basantapatti Gaun Nul Sadak Bata Dakshin Kedar Jaiswal Ko Ghar	6	10	146
D	232M15D097	Bramasthan Mandri Dekhe Purba Ram Ashre Mahato Ko Ghar Samma	1	10	147
D	232M15D081	Kedar Jasiwal Ko Ghar Bata Uttar Purba Hudai Banarasi Pd Ko Ghar	6	10	148
D	232M15D117	Nuniya Tole Road	1	10	149
D	232M15D042	Masjid Dekhi Uttar Ishraf Ko Ghar Samma	5	10	150



Road Class	Road Code	Road Name	Ward Pass	Total Score	Rank
D	232M15D056	Mul Sadak Yar Muhammed Ko Ghar Dekhi Madarsa Jane Bato	4	10	151
D	232M15D050	Bishwanath Ko Ghar Dekhi Ram Chandra Ko Ghar Samma	4	10	152
D	232M15D062	Mul Bato Rajindra Shah Ko Ghar Dekhi Shekh Taiyab Ko Khaliyan Samma	4	10	153
D	232M15D119	Falahull Muslimin Madarsa Dekhi Purba Nuniya Tol Hudai Mul Sadak Jane Bato	1	10	154
D	232M15D041	Mul Bato Monib Ko Ghar Dekhi Uttar Jainoon Ko Ghar Samma	5	10	155
D	232M15D068	Dharmendra Prasad Ko Ghar Dekhi Ma Bi Basantapatti Samma	4	10	156
D	232M15D046	Garib Saha Ko Ghar Dekhi Hari Ray Ko Khaliyan Samma	4	10	157
D	232M15D061	Ablesh Sheth Ko Ghar Dekhi Paschim Jane Bato Sundar Shako Ghar Samma	4	9	158
D	232M15D040	Mul Bato Mojahid Ko Ghar Dekhi Uttar Safad Dewan Ko Ghar Samma	5	9	159
D	232M15D052	Moti Rahaman Ko Ghar Dekhi Masjid Samma	4	9	160
D	232M15D086	Tejapakad Baiju Singh Khet Dekhi Paschim Haraiya Inarwari Jane Sadak	3,6	9	161
D	232M15D066	Pokhariya Gahatol Bata Purba Purwa Badh Jane Sadak	3,4	9	162
D	232M15D076	Basantapatti Naya Bato I	6	9	163
D	232M15D036	Enus Ko Ghar Dekhi Paschim Jane Bato Ishrafi Ko Ghar Hudai Asin Ko Ghar Samma	5	9	164
D	232M15D078	Basantapatti Mab I Ko Pokhari Jane Bato	6	9	165
D	232M15D063	Jogindar Thakur Bari Dekhi State Boarding Jane Bat	4	9	166
C	232M15C031	Satlal Ko Ghar -Bata Uttar Isha Mohammad Ko Ghar Bata Uttar-Nageswornath Mandir Hudai Nahar Ko Culvert Jodne Sadak	2	8	167
D	232M15D087	Tejapakad Aa Bi Dekhi Baiju Singh Ko Khet Hudai Samsul Ko Ghar Samma	3	8	168
D	232M15D077	Indar Dev Raut Ko Ghar Dekhi Hari Narayan Ko Ghar Hudai Ra Jai Mangal Ko Ghar Hudai Mogal Raut Ko Ghar Samma	6	7	169
B	232M15B018	Lalbakaiya Badh Sadak	3	7	170
C	232M15C015	Mahendra Shahko Khet Dekhi-Narakatiya Simana Samma	6	7	171
C	232M15C029	Bandh Bata Uttar Nahar Ko Culvert Jodne Sadak	1	7	172

Road Class	Road Code	Road Name	Ward Pass	Total Score	Rank
D	232M15D085	Tejapakad Bata Paschim Jane Naya Sadak	6	7	173
D	232M15D035	Inus Ansari Ko Ghar Dekhi Snrtp Sadak Samma	5	7	174
D	232M15D021	Ram Adhar Ko Ghar Dekhi Umesh Ko Ghar Samma	7	7	175
D	232M15D007	Babulal Ko Ghar Dekhi Sikindar Pattel Ko Ghar Samma Jane Bato	8	7	176
D	232M15D095	Koktar Ko Ghar Bata Purba Lalbakiya Badh Jane Sadak	3	6	177
C	232M15C006	Bramhathan Bata Rajdevi Mandir Jane Bato	9	6	178
D	232M15D075	Basantapatti Naya Bato 1	6	6	179
D	232M15D029	Babulal Sah Ko Ghar Dekhi Nirgun Ko Khet Hudai Mul Sadak Samma	6	4	180
D	232M15D059	Ghadari Dekhi Pokhariya Jane Mod Samma	4	4	181
D	232M15D053	Laxman rautko ghar bata- uttar purba -shekg samsul ko jane sadak	4	4	182
D	232M15D101	Lalbakiya Badh Bata Purba Kamdehi Nadi Jane Bato	1,2	4	183
D	232M15D058	Dhopkat Dekhi Mauwa Ko Rukh Hudai Ghadariya Jane Batoko Chowk Samma	4	3	184
D	232M15D105	Jadha Shah Ko Ghar Bata Nahar Jodne Sadak	2	3	185
C	232M15C023	Mul Sadak Pokhariya Tol Bata Purba Lal Bakaiya Badh Jane Sadak	3	3	186
D	232M15D096	Musahartol Road	2	3	187
D	232M15D028	Bhedyahi Naya Bato 2	6	2	188
C	232M15C041	Bangkul Simana Sadak	7	2	189
C	232M15C019	Inarwari Simana Sadak	3	2	190

5.5 Road Interventions

Strategic Roads and District Roads are excluded for determining the cost of interventions, as the road standard and per unit cost of it also quite different than local level roads. The cost for the construction has determined based on these interventions. The interventions has categorized into two parts: one is road geometry while the other one is the road surface interventions. The road geometry interventions includes requirement of widening while the surface type interventions includes all interventions other than widening. The total cost of all the road interventions has been determined. All the cost associated has been adopted from the "standard cost for different interventions" given in the MTMP Preparation Guidelines.

MTPP cost of all road is around 0.875 billion and taking the budget of the current fiscal as the base and increasing the budget yearly by 10%, all road interventions is assumed to be completed in 27 years.

Table 1

Code	Conservation	Improvement	New construction	Total
232M15A001	1,268	5,312	-	6,579
232M15B001	794	1,165	-	1,959
232M15B002	1,414	2,074	-	3,489
232M15B003	2,655	4,148	-	6,804
232M15B004	3,886	-	-	3,886
232M15B005	1,898	5,493	-	7,392
232M15B006	3,219	17,093	-	20,311
232M15B007	3,026	5,936	117,426	126,387
232M15B008	9,875	19,382	-	29,257
232M15B009	2,340	3,432	-	5,772
232M15B010	2,010	2,948	-	4,957
232M15B011	3,296	5,367	-	8,663
232M15B012	663	972	-	1,634
232M15B013	6,651	9,754	-	16,405
232M15B014	2,245	3,293	-	5,538
232M15B015	854	1,253	-	2,108
232M15B016	1,643	2,410	-	4,054
232M15B017	2,787	4,539	-	7,326
232M15B018	9,701	14,228	-	23,930
232M15B019	2,720	3,990	-	6,710
232M15B020	613	899	-	1,513
232M15C001	1,765	2,589	2,481	6,836
232M15C002	604	885	20	1,509
232M15C003	-	-	4,806	4,806
232M15C004	1,069	1,568	-	2,637
232M15C005	885	1,299	-	2,184
232M15C006	272	399	-	672
232M15C007	689	1,011	-	1,700
232M15C008	988	1,449	83	2,520
232M15C009	1,254	2,572	-	3,826
232M15C010	1,477	2,697	-	4,174
232M15C011	3,498	18,326	-	21,823



Code	Conservation	Improvement	New construction	Total
232M15C012	1,398	2,051	-	3,449
232M15C013	-	-	-	-
232M15C014	4,222	8,012	-	12,234
232M15C015	2,049	3,005	-	5,054
232M15C016	1,706	2,502	-	4,208
232M15C017	3,827	5,613	-	9,440
232M15C018	661	970	-	1,631
232M15C019	1,190	1,745	-	2,934
232M15C020	3,613	5,885	-	9,498
232M15C021	4,284	6,906	-	11,189
232M15C022	638	935	-	1,573
232M15C023	563	825	-	1,388
232M15C024	1,579	2,316	-	3,895
232M15C025	1,627	2,386	-	4,013
232M15C026	1,962	2,878	-	4,840
232M15C027	5,397	11,960	75,340	92,697
232M15C028	1,990	2,919	-	4,908
232M15C029	1,113	1,632	-	2,745
232M15C030	1,849	2,712	-	4,562
232M15C031	908	1,332	-	2,241
232M15C032	1,078	2,420	1,608	5,105
232M15C033	1,841	2,699	-	4,540
232M15C034	613	899	-	1,512
232M15C035	1,279	1,876	-	3,155
232M15C036	5,948	8,723	-	14,671
232M15C037	3,267	18,610	6,496	28,373
232M15C038	3,599	5,278	-	8,877
232M15C039	4,231	21,975	-	26,207
232M15C040	3,685	5,634	-	9,318
232M15C041	862	1,264	-	2,127
232M15C042	1,398	2,050	-	3,448
232M15C043	2,704	3,966	-	6,669
232M15C044	2,635	7,053	-	9,688
232M15C045	2,339	3,431	-	5,770
232M15C046	1,071	1,570	119	2,760
232M15C047	7,046	13,817	-	20,862
232M15C048	1,626	2,385	-	4,011

Code	Conservation	Improvement	New construction	Total
232M15C049	1,096	1,607	-	2,703
232M15C050	1,914	2,807	-	4,721
232M15D001	834	1,223	-	2,056
232M15D002	202	296	-	497
232M15D003	365	536	-	901
232M15D004	271	398	-	669
232M15D005	-	-	3,525	3,525
232M15D006	404	593	-	997
232M15D007	64	94	-	158
232M15D008	509	746	-	1,255
232M15D009	231	338	-	569
232M15D010	-	-	11,628	11,628
232M15D011	-	-	-	-
232M15D012	227	332	-	559
232M15D013	126	184	-	310
232M15D014	289	424	-	713
232M15D015	455	667	-	1,122
232M15D016	292	428	-	720
232M15D017	239	351	-	590
232M15D018	509	2,737	-	3,247
232M15D019	1,122	1,645	-	2,767
232M15D020	949	1,391	-	2,340
232M15D021	180	264	-	444
232M15D022	5,523	8,101	-	13,624
232M15D023	1,274	1,868	-	3,142
232M15D024	2,439	3,577	-	6,016
232M15D025	259	380	-	640
232M15D026	272	398	-	670
232M15D027	298	486	593	1,377
232M15D028	-	-	937	937
232M15D029	-	-	2,503	2,503
232M15D030	124	182	-	307
232M15D031	163	238	-	401
232M15D032	246	360	-	606
232M15D033	346	508	-	854
232M15D034	910	1,335	-	2,246
232M15D035	150	219	-	369

Code	Conservation	Improvement	New construction	Total
232M15D036	220	322	-	541
232M15D037	185	271	-	455
232M15D038	-	-	3,011	3,011
232M15D039	710	1,042	-	1,752
232M15D040	183	269	-	452
232M15D041	138	202	-	340
232M15D042	110	161	-	271
232M15D043	539	791	-	1,330
232M15D044	2,621	3,957	-	6,578
232M15D045	471	691	-	1,162
232M15D046	167	245	-	412
232M15D047	303	444	-	747
232M15D048	128	188	-	316
232M15D049	107	158	-	265
232M15D050	70	103	-	172
232M15D051	356	522	-	878
232M15D052	78	114	-	192
232M15D053	647	949	-	1,597
232M15D054	466	684	-	1,150
232M15D055	393	576	-	969
232M15D056	204	299	-	502
232M15D057	1,218	1,786	-	3,004
232M15D058	445	653	-	1,098
232M15D059	451	661	-	1,112
232M15D060	2,314	3,768	-	6,082
232M15D061	385	565	-	950
232M15D062	229	336	-	565
232M15D063	94	137	-	231
232M15D064	578	847	-	1,425
232M15D065	252	369	-	621
232M15D066	1,754	2,572	-	4,326
232M15D067	329	482	-	811
232M15D068	296	434	-	730
232M15D069	210	308	-	518
232M15D070	-	-	1,343	1,343
232M15D071	519	761	-	1,279
232M15D072	108	159	-	267



Code	Conservation	Improvement	New construction	Total
232M15D073	117	172	-	289
232M15D074	421	618	-	1,039
232M15D075	-	-	3,204	3,204
232M15D076	-	-	1,175	1,175
232M15D077	250	367	-	617
232M15D078	118	173	-	290
232M15D079	1,168	1,713	-	2,881
232M15D080	231	338	-	569
232M15D081	373	547	-	921
232M15D082	798	1,171	-	1,969
232M15D083	346	507	-	853
232M15D084	139	204	-	343
232M15D085	-	-	4,158	4,158
232M15D086	1,110	1,627	-	2,737
232M15D087	182	268	-	450
232M15D088	359	527	-	886
232M15D089	404	593	-	997
232M15D090	446	654	-	1,101
232M15D091	537	788	-	1,325
232M15D092	1,375	2,124	-	3,500
232M15D093	591	867	-	1,459
232M15D094	733	1,075	-	1,808
232M15D095	373	546	-	919
232M15D096	150	220	-	370
232M15D097	-	-	400	400
232M15D098	675	989	567	2,231
232M15D099	-	-	716	716
232M15D100	902	1,323	-	2,225
232M15D101	1,239	1,817	-	3,056
232M15D102	1,383	2,028	-	3,411
232M15D103	365	535	-	899
232M15D104	782	1,147	-	1,929
232M15D105	-	-	1,550	1,550
232M15D106	625	917	-	1,542
232M15D107	477	700	-	1,177
232M15D108	61	89	-	150
232M15D109	-	-	1,424	1,424



Code	Conservation	Improvement	New construction	Total
232M15D110	338	495	-	833
232M15D111	390	572	-	961
232M15D112	387	567	-	954
232M15D113	110	161	-	271
232M15D114	138	203	-	341
232M15D115	180	264	-	443
232M15D116	143	209	-	352
232M15D117	305	448	-	753
232M15D118	299	438	-	737
232M15D119	-	-	4,251	4,251
Total	220,429	405,259	249,363	875,052



CHAPTER 6 : First Five Year Municipal Transport Master Plan

The previous year budget of the municipality shall be collected and the growth rate shall be then determined. Then short term and long term financial plan shall be forecasted. The Projected financial plan for five year shall be prepared.

6.1 Five year Projected Financial Plan

The current budget plan of the municipality allocated for the road sector as per the municipal documents is NRs 80467000. Based on the growth pattern, the growth factor is determined and the budget for coming year has forecasted as shown in below. The composition of source of budget in municipality shows heterogeneous in nature. The very high amount of budget is granted by the central government and federal government. So, if there is any changes occurred in granted amount by government, there result will be significant change in the municipality budget. The government of Nepal has intended to increase the total budget of each local bodies by 10-15% each year to meet the physical development of these bodies. Hence, In case of this Municipality the growth rate that has been used in all the calculations is 10%, as it is used for general purpose when we don't have precise growth rate.

6.2 Sharing of Fund

The financial plan and the finalization of the MTMP shall be done based on terms of reference as given by ministry. During preparation of MTMP, the investment from total available resources under road sector for different classes of the road can be distributed as portion 30% for maintenance at first and remaining 70% shall be distributed.

On discussion with local authorities based on local condition and requirement of this Municipality sharing of budget was adjusted as 55% in improvement, 15% for new construction and 30% in Maintenance of road for next 5 fiscal years.

The estimate of budget required for the five years is prepared based on the assumption that the Class A road is to be made two lanes, Class B road is to be made intermediate lane and Class C and Class D road is to be made single lane and lane considered are assumed to be gravelled. Due to limitation of budget, the roads are assumed to have simple cross drainage structures within this period whereas cross drainage structures such as Bridges are not included in this budget and expected to be completed within this time period by external sources. For approximate costing, the construction rate of road appurtenances is assumed to be equal to that of graveling cost and for short term the minimum width of 3m is assumed if existing road width doesn't exist. Similarly, longitudinal drainage on both side of roadway is considered in this plan.



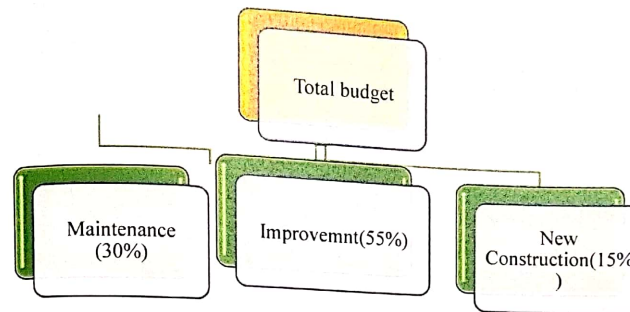


Figure 20 Budget Allocation as Per Interest of Local Authorities over Planning of Municipal Road

6.3 Year Wise Target

Year wise target shall be developed based on available budgets.

Table 17: Five year projected financial project

Fiscal Year	2075/76	2076/77	2077/78	2078/79	2079/80
Budget Allocated for Road	80467	88514	97365	107102	117812
Conservation	24140	26554	29210	32130	35344
Improvement	44257	48683	53551	58906	64796
New Construction	12070	13277	14605	16065	17672

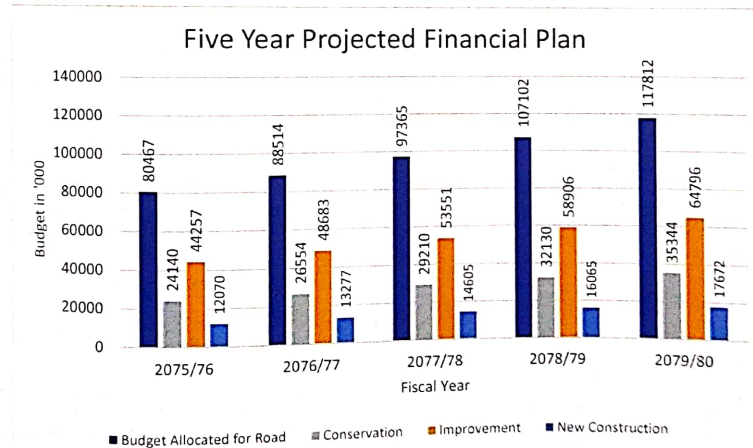


Figure 21 Forecasted Financial Plan of the Municipality for construction of road



6.4 Prioritized Municipality road for MTMP

Municipality Transport master Plan (MTMP) of this Municipality includes following prioritized roads for upcoming five years.

Table 18: List of prioritized roads for MTMP

Road Class	Road Code	Road Name	Ward Pass	Total Score	Rank
B	232M15B014	Bhediya-Basantapatti			
C	232M15C044	Bhediya Bazaar-Pokhariya Damar Tole	5,6	74	1
B	232M15B019	Tejpakad-Laukaha-Pokhariya	5	72	2
C	232M15C017	Basantapatti Ma Bi To Madan Shah Ko Ghar Samma	3,4	70	3
C	232M15C037	Namagada Bata Paschim Motopur Jane Bato	3,6	69	4
C	232M15C014	Narkatiya- Gaun Bata-Idagah Bata Bharatiya Simana Samma	5,8	66	5
C	232M15C027	Pokhariya Ghadari-Jigadawa Belbichawa	7,8	63	6
D	232M15D082	Bhediya-Basantapatti-Inarwari-Pataura	1,2,3	63	7
D	232M15D034	Badri Chowk- Uttar Namagada Hudai Ramsingh Patel Ko Ghar Jodne Sadak	6	60	8
B	232M15B010	Sukdev Chowk -Jarlnel Ko Ghar Bata Nahar Hudai Badh Jane Sadak	5	55	9
D	232M15D015	Rajmarga Bata-Sheikh Dukha Ko Ghar -Satindar Ko Ghar Jane Bato	1,2,3	53	10
D	232M15D044	Basanpatti-Laukaha-Pokhariya	7	53	11
D	232M15D001	Ramdhar Ko Ghar, Chadah Mandir Chowk-Bindasaha Sonarko Ghar-Bharatiya Simana Samma	4,6	53	12
C	232M15C050	Jigadawa Belbichawa Bypass Road	9	52	13
C	232M15C040	Narkatiya Bata Ita Udhog Hudai Sekhauna Jodne Sadak	1	51	14
B	232M15B006	Mul Sadak Bata Wada 8 Ko Karyalaya Hudai Bhkuwa Khola Hudai Rajmarga Jodne Sadak	7	50	15
C	232M15C047	Laukaha-Pokhariya-Lal Bakaiya Badh	7,8	46	16
C	232M15C001	Jugul Rautko Ghar-Prithvi Narayan Rautko Ghar Bata Kabrasthan Jane Bato	3,4	45	17
C	232M15C030	Jigadawa Nimab Bata Paschim-Nanak Mahara Ko Ghar Hudai Badh Samma Sadak	9	44	18
B	232M15B004	Khap - Badimasjid-Mansari	2	44	19
D	232M15D014	Mul Sadak Bata-Mansik Raut Ko Ghar Bata Dinesh Thakur Ko Ghar Hudai Pramod Raut Ko Ghar Jodne Sadak	9	42	20
			7,8	41	21



Road Class	Road Code	Road Name	Ward Pass	Total Score	Rank
B	232M15B005	Narkatiya Bata Nahar Ko Culvert Bata Bhuratiya Simana Jane Bato	8	40	22
D	232M15D024	Bhediyahi-Sirtfal Raut Ko Khet Hudal Basantapatti Simana	6	39	23
D	232M15D025	Hari Chandra Sah Ko Ghar Batajal Govinda Ko Ghar Hudal Surtip Sadak Samma	6	38	24
C	232M15C038	Bhakuwa Nadi Ko Pul Bata Uttar Hudal Basantapatti Jane Bato	6,7	36	25
D	232M15D011	Mansik Raut Ko Ghar-Ramananda Ko Ghar Jane Bato	8	35	26
D	232M15D019	Hanuman Mandir Dekhi Ram Janaki Dharmasala Samma	7	35	27
C	232M15C048	Wajaya Sadak(Pokhariya-Laukaha-Hulak Sadak Bhediyahi Bazaar	4,5	34	28
B	232M15B007	Tejapakad-Lal Bakaliya-Jingadawa Belichawa	2,3	33	29
C	232M15C021	Shiva Mandir Chowk Bata Jalandhar Ko Ghar Hudal Uttar Baudimal Chowk	3	33	30
D	232M15D022	Canal Road	4,5,6	32	31
C	232M15C046	Pokhariya Damar-Nahar Jodne Sadak	5	32	32
C	232M15C013	Purano Bazaar-Bramhathan Bata Uttar Hudal Mul Sadak Jodne Sadak	7,8	31	33
A	232M15A001	Bhediyahi-Laukaha-Pokhariya	4	30	34
D	232M15D106	Darbariya Ko Pasal Bata Bata Purba Hospital	1,2	30	35
C	232M15C009	Rampur-Idgaha Bata Bharat Simana Samma	9	30	36
D	232M15D012	Ramananda Ko Ghar Jane Bato	8	29	37
C	232M15C011	Bhakuwa Khola Jhotunge Pul Isanath Napa Ko Simana Sadak	5,8	29	38
C	232M15C025	Pokhariya Damar Bata Ita Bhatta Hudal Laukaha Jane Sadak	4,5	29	39
B	232M15B015	Bhediyahi-Bata Purba Wada 4 Ko Simana Samma Ko Sadak	4,5,6	29	40
B	232M15B009	Sukdev Chowk Bata Purba Highway Jodne Mul Sadak Belblehawa	1	28	41
C	232M15C033	Blpat Ko Ghar - Uttar Purba Hudal Bhelyahai Simana Sadak	1	28	42
C	232M15C002	Swastha Chowki Bata Panitanki Chowk Bata Dasgaja	9	28	43
D	232M15D033	Paras Raut Ko Ghar Dekhi Rama Kant Ko Ghar Hudal Surtip Sadak Jane	5,6	28	44
B	232M15B008	Bhediyahi -Tejapakad	3,4,6	28	45

Road Class	Road Code	Road Name	Ward Pass	Total Score	Rank
D	232M15D020	Khap Tole Bata Janta Pr Abi Hudai Rajmarga Jodne Sadak	7	27	46
D	232M15D038	Farmudko Ghar-Nahid Ansariko Ghar-Rajpur Simana Samma	5	27	47
C	232M15C012	Rampur Bata-Narkatiya Jane Bato	8	27	48
C	232M15C043	Basantapatti-Inarwari	6	27	49
C	232M15C032	Sukhadi Ko Ghar Bata Paschim Jamir Akhtar Ko Ghar Hudai Nahar Ko Culvert Jodne Sadak	2	27	50
C	232M15C020	Tejapakad Chowk-Bramhathan- Baudimai Chowk	3	26	51
C	232M15C028	Jhingdwa Aa Bi To Purba Jane Kamdehi Nadi Hudai Main Road Jane	1	26	52
C	232M15C004	Boudimai ko mandir bata purba uttar hudai Bikhardas tatma ko ghar jane bato	9	25	53
D	232M15D004	Wwada Karyalaya Bata Chhatghat Pokhari-Mansuri	9	25	54
B	232M15B012	Narkatiya Purbari Madarsa To Chhath Ghat	7	25	55
C	232M15C045	Rajpur Simana Bata Nahar Jodne Sadak	5	24	56
C	232M15C035	Jidagawa Belbichawa Bata Masahartol Jane Bato	1,2,3	24	57
C	232M15C039	Snrtpr Bata Khap Tol Hudai Pokwa Bam Nahar Samma	7	24	58
C	232M15C008	Rampur Gaun Jugal Raut Ko Ghar Bata Hanuman Mandir Bata Dasgaja	9	24	59
D	232M15D026	Anchit Prasad Ko Ghar Dekhi Jai Govinda Ko Ghar Hudai Snrtpr Sadak Samma	6	23	60

6.5 First Five Year Transport Implementation Plan

First funding is allocated to conservation as far as the budget allows for this, giving priority in the order emergency - routine - recurrent blacktop - recurrent gravel - recurrent earthen - periodic blacktop - periodic gravel.

Second any remaining funding after allocation to conservation is allocated to improvement of the different roads, giving priority to the roads with higher score. Road sections for which there is insufficient budget in a specific year are delayed till the subsequent year.

Third any remaining funding after allocation to conservation and improvement is allocated to new construction, whereby priority is again given to the roads with higher score. Road sections for which there is insufficient budget in a specific year are delayed till the subsequent year.

Fourth - any remaining funding after conservation, improvement and new construction is indicated at the bottom of the table.



Table 19: First Five Year Transport Implementation Plan

	Item	Year									
		2075/76	2076/77	2077/78	2078/79	2079/80					
A	Fiscal year	80,467	88,514	97,365	107,102	117,812					
	Total budget	127.29	127.29	127.29	127.29	127.29					
B	Core network length (km)	1.41	3.05	4.62	7.58	9.61					
	Blacktop (km)	13.86	22.00	30.50	41.59	51.97					
	Gravel (km)	112.01	102.24	92.16	78.12	65.70					
	Earthen (km)	24,140	26,554	29,210	32,130	35,344					
C	Conservation (NRs)	3,819	3,819	3,819	3,819	3,819					
	Emergency	2,546	2,546	2,546	2,546	2,546					
	Routine	706	1,525	2,312	3,788	4,806					
	Recurrent (blacktop)	5,545	8,801	12,201	16,637	20,789					
	Recurrent (gravel)	11,524	9,864	8,331	5,341	3,383					
	Recurrent (earthen)	-	-	-	-	-					
D	Periodic (blacktop)	-	-	-	-	-					
	Periodic (gravel)	-	-	-	-	-					
	Improvement Cost	40,234	44,257	48,683	53,551	58,906	BT	GR	BT	GR	BT
	232M15B014	6,745	-	-	-	-	-	-	-	-	-
	232M15C044	3,864	-	-	-	-	-	-	-	-	-
	232M15B019	3,990	-	-	-	-	-	-	-	-	-
	232M15C017	5,613	-	-	-	-	-	-	-	-	-
	232M15C037	5,035	0.43	1.17	-	-	-	-	-	-	-
	232M15C014	9,584	1.21	-	-	-	-	-	-	-	-

232M15D022	8,631	-	3.68	-	-	-	-	-	-	3,830	-	1.63	4,802	-	2.05	-	-
232M15C046	14,767	-	0.71	-	-	-	-	-	-	-	-	-	14,767	-	0.71	-	-
232M15C013	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
232M15A001	1,859	-	0.85	-	-	-	-	-	-	-	-	-	1,859	-	0.85	-	-
232M15D106	2,054	-	0.42	-	-	-	-	-	-	-	-	-	2,054	-	0.42	-	-
232M15C009	1,839	-	0.84	-	-	-	-	-	-	-	-	-	1,839	-	0.84	-	-
232M15D012	332	-	0.15	-	-	-	-	-	-	-	-	-	332	-	0.15	-	-
232M15C011	5,130	-	2.33	-	-	-	-	-	-	-	-	-	5,130	-	2.33	-	-
232M15C025	2,386	-	1.08	-	-	-	-	-	-	-	-	-	2,386	-	1.08	-	-
232M15B015	1,253	-	0.57	-	-	-	-	-	-	-	-	-	1,253	-	0.57	-	-
232M15B009	3,432	-	1.56	-	-	-	-	-	-	-	-	-	3,432	-	1.56	-	-
232M15C033	2,699	-	1.23	-	-	-	-	-	-	-	-	-	2,699	-	1.23	-	-
232M15C002	885	-	0.40	-	-	-	-	-	-	-	-	-	885	-	0.40	-	-
232M15D033	508	-	0.23	-	-	-	-	-	-	-	-	-	508	-	0.23	-	-
232M15B008	16,082	2.82	-	-	-	-	-	-	-	-	-	-	11,605	2.04	-	4,477	0.79
232M15D020	1,391	-	0.63	-	-	-	-	-	-	-	-	-	-	-	-	1,391	-
232M15D038	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
232M15C012	6,094	-	0.93	-	-	-	-	-	-	-	-	-	-	-	-	6,094	-
232M15C043	3,966	-	1.80	-	-	-	-	-	-	-	-	-	-	-	-	3,966	-
232M15C032	1,582	-	0.72	-	-	-	-	-	-	-	-	-	-	-	-	1,582	-
232M15C020	5,885	1.03	-	-	-	-	-	-	-	-	-	-	-	-	-	5,885	1.03
232M15C028	2,919	-	1.33	-	-	-	-	-	-	-	-	-	-	-	-	2,919	-
232M15C004	2,406	-	0.71	-	-	-	-	-	-	-	-	-	-	-	-	2,406	-

CHAPTER 7: Conclusion

Road transportation is most crucial for socio-economic development of district. Municipality should give more emphasis on resource collection and its proper allocation and efficient mobilization. This MTMP will guide for this purpose. The MTMP is the result of studies considering socio-economic, environmental analysis and potentiality of various sectors as well as the accessibility to transport facilities in the Municipality, which will draw the future scenario of the Municipality and rural road development. MTMP focuses on existing transportation situation, expected future road network accessibility and socio-economic benefits. It provides directives on utilization of the local resources by local institutions as well as other development agencies in line with the decentralization and local self-government act. In addition, it will provide Government and other donor agencies a rational basis on which to decide on future investments efficiently that will improve district transport accessibility situation.

The proposed interventions are reflection of the requirement of Municipality to improve accessibility of people on goods and services and planned on current trend of financial resource availability.

It is strongly recommended that Municipality shall strictly follow the MTMP particularly in the Perspective Plan of Municipality Road Network in deciding the sub-projects to be undertaken for development for future even beyond the five-year period. Strong commitment from all stakeholders is necessary for its implementation. It is also suggested that the MTMP shall be revised at the end of every fifth year evaluating the previous planning and implementation. Municipality should go ahead with required revisions if the Municipality development potentials have changed tremendously.



आज मिति २०७२ साल माघ १६ गते शनिवारको दिन बिहानै १०:३० बजे यहाँ प्रहरी व. व. काका नगर प्रमुख श्री शैल बज्रिज महोदय अध्यक्षतामा तयारितका पत्राचारको साथै तथा प्रहरीकायानामाहरुको उपस्थितिमा बैठक बसियो।

तपसिल

१. श्री ब्रह्म ब्रह्मि नगर प्रमुख
 २. श्री सुगन्धी जिरी नगर उप-प्रमुख
 ३. श्री मोल लमिछन्ना वडा अध्यक्ष वडा नं. १
 ४. श्री मो. एमालु रसमान वडा अध्यक्ष वडा नं. २
 ५. श्री महेसा सिंह वडा अध्यक्ष वडा नं. ३
 ६. श्री जनहर राय यादव वडा अध्यक्ष वडा नं. ४
 ७. श्री मो. नेजमुद्दिन वडा अध्यक्ष वडा नं. ५
 ८. श्री जितेन्द्र कुमाल वडा अध्यक्ष वडा नं. ६
 ९. श्री खुनाय उल्लुख वडा अध्यक्ष वडा नं. ७
 १०. श्री खेदु मुखिया निरा वडा अध्यक्ष वडा नं. ८
 ११. श्री ब्रह्म डगुल वडा अध्यक्ष वडा नं. ९
 १२. श्री नृजलाल हजरा कमिपण्डित/ब्रह्म
१३. श्री मोहरलाल सम कार्यपालिका अध्यक्ष
 १४. श्री राम प्रताप छत्रलौहा " " ~~सह~~
 १५. श्री रामाप्रते देवी पासवान " " भा. मा. पत्री
 १६. श्री राजकुलोया देवी " "
 १७. श्री आनकी देवी " "
 १८. श्री राजवती देवी " "
 १९. श्री अनिलुन लालुन " "
 २०. श्री देवनाथ यादव प्र. उ. फासिह
 २१. श्री अब्दुल रहम भोलापे नातु ~~सह~~
 २२. " दीपेन्द्र प्रसाद यादव इन्जिनियर ~~सह~~
 २३. " ओम प्रकाश प्रसाद - खन इन्जिनियर ~~सह~~
 २४. " राजेश राउत कानून व्यवसायी ~~सह~~
 २५. " रमेश प्रसाद इन्जीनियर ~~सह~~
 २६. " हरी प्रसाद यादव सखु पौजाई ~~सह~~
 २७. " राजन सिंह पटेल ~~सह~~

प्रस्ताव नं. (१) शहडू गुरुयोजना तयार गर्ने सम्बन्धमा ।
प्रस्ताव नं. (२) न.पा. स्तरीय शहडू समन्वय समिति गठन सम्बन्धमा ।

प्रस्ताव नं. (३) शहडूको क्षेत्राधिकार सम्बन्धमा ।
प्रस्ताव नं. (४) शहडूको प्राथमिकीकरण सम्बन्धमा ।
प्रस्ताव नं. (५) खानेपानी बाँडफाँड सम्बन्धमा ।

प्रस्ताव नं. (६) विपरीत डाँडा र हेलपट्टा शहडूको सम्बन्धमा ।

प्रस्ताव नं. (७) माथि छलफल गर्दा तपसिल बमोजिमको नगरपालिका स्तरीय शहडू समन्वय समिति (MRCC) गठन गर्ने निर्णय गरियो ।

निर्णय :- प्रस्ताव नं. (१) माथि छलफल गर्दा तपसिल बमोजिमको नगरपालिका स्तरीय शहडू समन्वय समिति (MRCC) गठन गर्ने निर्णय गरियो ।

निर्णय :- प्रस्ताव नं. (२) माथि छलफल गर्दा तपसिल बमोजिमको नगरपालिका स्तरीय शहडू समन्वय समिति (MRCC) गठन गर्ने निर्णय गरियो ।

- तपसिल
- क) नगर प्रमुख - अध्यक्ष
 - ख) नगर उप-प्रमुख - सदस्य
 - ग) वडा नं. १-६ देखि १० सम्मका वडा अध्यक्षहरू - सदस्य
 - घ) प्रमुख प्रशासनिक अधिकृत - सदस्य सचिव

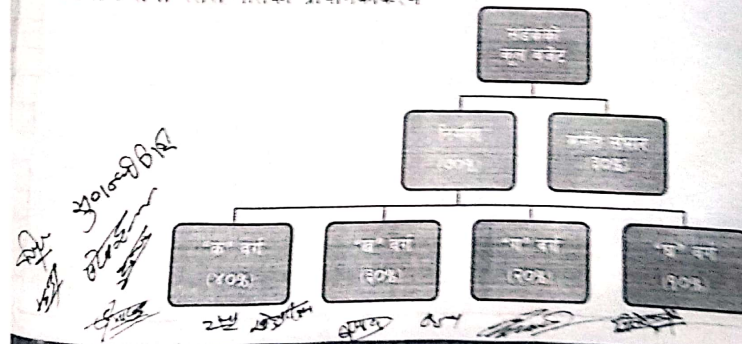
निर्णय :- प्रस्ताव नं. (३) माथि छलफल गर्दा तपसिल बमोजिमको शहडूको क्षेत्राधिकार तपसिल बमोजिम शहडूको निर्णय गरियो ।

क्र.सं.	शहडूको प्रकार	क्षेत्राधिकार	सेट व्यक्त
क)	'क' वर्ग	१५ मीटर	३ मीटर
ख)	'ख' वर्ग	१० मीटर	२.५ मीटर
ग)	'ग' वर्ग	८ मीटर	२ मीटर
घ)	'घ' वर्ग	६ मीटर	१.५ मीटर

सहसचिव
नगर प्रमुख
वडा अध्यक्षहरू

[illegible]

निर्माण तथा स्तरोन्नतिको प्राथमिकीकरण



2. Photographs



Ward level meeting



Exiting road condition at municipality area





Exiting road condition at municipality area



Initial orientation workshop





Municipal representatives



Initial orientation workshop



