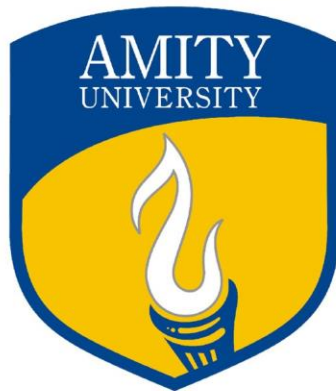


Field Survey Report

COMPREHENSIVE DEVELOPMENT PLAN

Kurukshetra City-2031



AMITY UNIVERSITY HARYANA

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AMITY SCHOOL OF ARCHITECTURE AND PLANNING

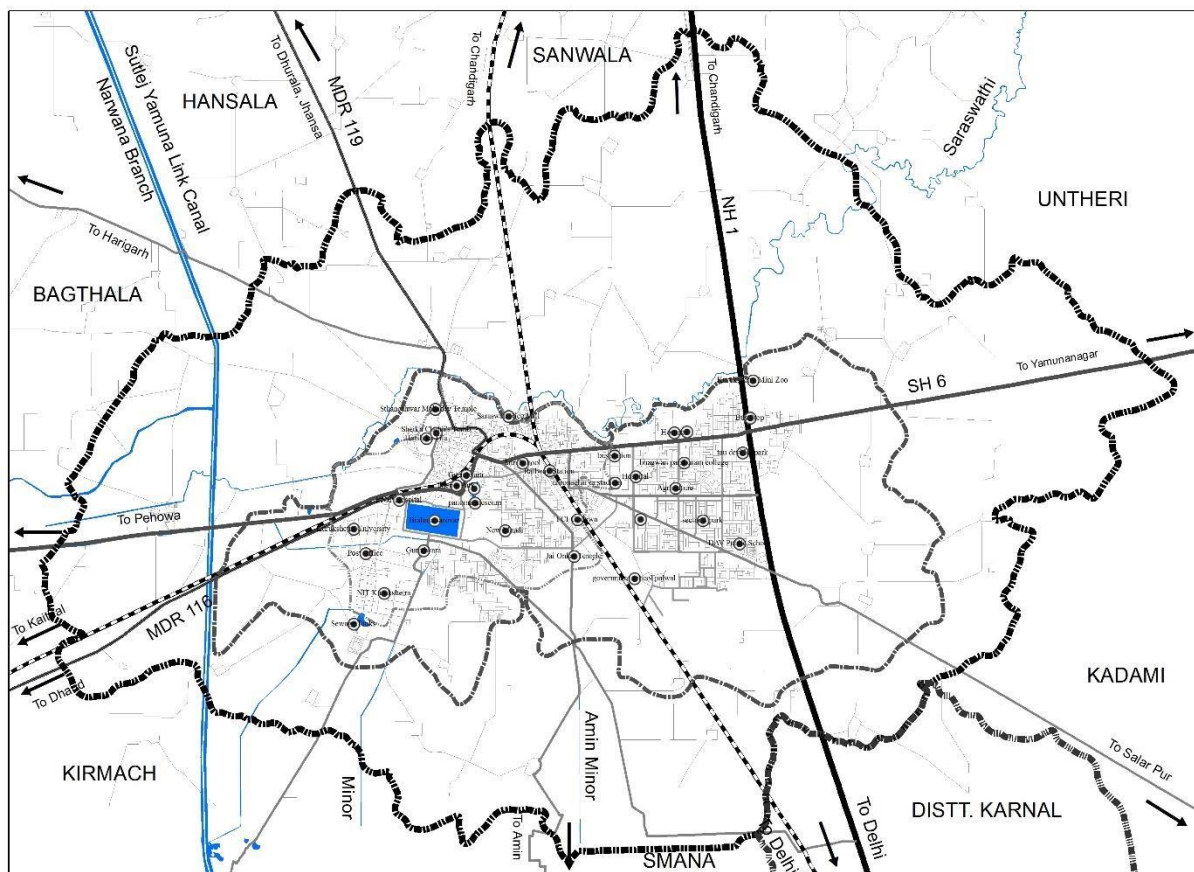
INTRODUCTION

Kurukshetra, being a place with great historical and religious importance, for its sacred association with the Vedas and the Vedic culture. It is well known for the battle of “*Mahabharata*” and Lord Krishna preached his philosophy of “*Karma*” as enshrined in the Hindu holy-book “*Bhagwad-Gita*”. It is also known as “*Dharmakshetra*” –a Holy Place. The region is named after King Kuru, the ancestor of Kauravas and Pandavas, as depicted in epic Mahabharata

It is a city in the state of Haryana and holds a population of 9,64,655 in 2016. It is also known as Thanesar. It is the District headquarters of the district of Kurukshetra.

In order to preserve and develop the environment of this historical and holy city, the Government of Haryana established Kurukshetra Development Board in 1968 to help in restoration and preservation of the cultural heritage of the town:-

1. Maintenance of Sanihat & Brahma Sarovar, Narkatari, Ban Ganga pilgrimages.
2. Landscaping of Brahma Sarovar, Sanihat Sarovar and Purushotam Bagh.
3. Landscaping of Light & Sound schemes at Jyotisar.
4. Establishment of Krishna Museum, Panorama and Science Centre.



SURVEY SCHEDULE

DAY 1, 17th February, 2017 – Secondary Data

DAY 2, 18th February, 2017 - Household Survey

DAY 3, 19th February, 2017 - Household Survey

DAY 4, 20th February, 2017 - Secondary Data

DAY 5, 21th February, 2017 - Traffic Volume Count & Origin-Destination Survey (Outer – Cordon Points)

DAY 6, 22th February, 2017 – Traffic Volume Count (Intersections)

DAY 7, 23th February, 2017 – Tourism Survey

Day -1&4:

Visit to the following offices:

Cultural and Heritage Museum – Tourism Data

Interacted with Mr. Rajendra Rana - Head Administrator, regarding the locations of all the heritage buildings /sites administered and maintained by Cultural and Heritage Museum and also the brief history of all these sites

Tourism Department (Kurukshetra University) - Tourism Data

Interacted with Mr. Narendra Singh – Chairman, regarding the research carried-out by the students of the University on the aspects of infrastructure and facilities provided to the tourist of the city.

District Statistical Office – Demographic Data

Interacted with Mrs. Lovely Arora, District Statistical Officer, regarding the demographic profile of the District like population, migration of people, floating population, birth and death rates, working class classifications with their distribution, classification of population on the economy at District Level.



Municipal Council, Thanesar – City Profile Data

Interacted with numerous higher officials of Municipal Corporation, Thanesar to know about the demographic profile of the city such as Administrative Boundary under Municipal Council, Ward-wise population etc.

Police Department – Crime related Data

Interacted with Mr. Abhishek Garg, Superintendent of Police, to collect data on the city's status on crime and the measures taken to curb these crimes with a comparative perspective of the year's 2014-2015 and 2015-2016, the count of force in the department etc.

Fire Department – Safety measures in the city

Interacted with Mr. Krishna, Fire Station Officer who had have explained the crew count of the fire fighting force and their vehicular types to fight the fire disasters and the numbers of cases filed every year.

CMO Hospital, – Health related Data

Interacted with the District Medical Officer who shared the details of the health-care centers, hospitals with their number of beds, deaths due various reasons etc.

Block Educational Office – Education related Data

With the BEO office, data regarding the number of educational institutions in the city, the Students-Teachers ratio, rate of students drop-out from schools and the fund management to various institutions were collected.

Kurukshetra Development Board – City Planning Data

Interacted with the District Town Planner of Kurukshetra City, who guided the students and provided the maps of the city of various time periods to analyze the growth of the city and the measures taken to meet the needs of the tourists visiting the city.

Public Health Department – Infrastructure related Data

The Public Health Department is a part of the Municipal Council, Thanesar but is a joint Organisation of the Municipal Council and the Kurukshetra Development Board. Its monitors the infrastructure provided to the residents of the city such as water supply, waste water management, canals and streams managements for irrigation etc.

District Industrial Centre (D.I.C) – Industry related Data

Interacted with the Head of D.I.C, Kurukshetra who shared the details of the reasons of the need of industries in the city with the trend of development, their location, classification of industries in the city, Investments for industrial development, Employment generation, goods production and export of finished goods, issues faced in the process of development and various other proposals for the next ten-- twenty years.

Day -2&3:

Visit to the residential areas of the city to understand the existing scenario of the city in terms of occupation structure, income and accessibility to major infrastructure facilities and amenities, condition of roads, etc. and also to know major problems faced by the people of the

city. It would also help as a cross-verification to the data provided by the officials of the various agencies.

Kurukshetra City has 36 wards on the whole. Students were allotted with various wards depending on the size of the wards, for the purpose of household survey, so as to help students know the status of infrastructure, condition of roads, etc. and also to know major problems faced by the people residing in those wards.



Apart from the household survey, a lecture was delivered by Swami Satyanandan Manvatavadi on the growth, development of Kurukshetra City as a tourist place. He briefly distinguished the difference between the terms growth and development. Also importance of the Sheikh Chilli Mansoleum, Brahma Sarovar and Jyotisar were predominantly explained.



Day -5&6:

Traffic Volume Count is survey carried out to have a measure of the number of vehicles passing in and out of the city and have a brief of the problems of congestion in the city, Distance travel by the people of the city and also the requirement of parking in the areas of high people visits. This survey is carried at two points of the city

1. Outer-Cordon points
2. Intersections

Origin-Destination is the survey carried hand-in-hand with Traffic Volume Count (at outer-cordon points) to know the exact locations of the people with their origin of the trip to the destination of the trip.

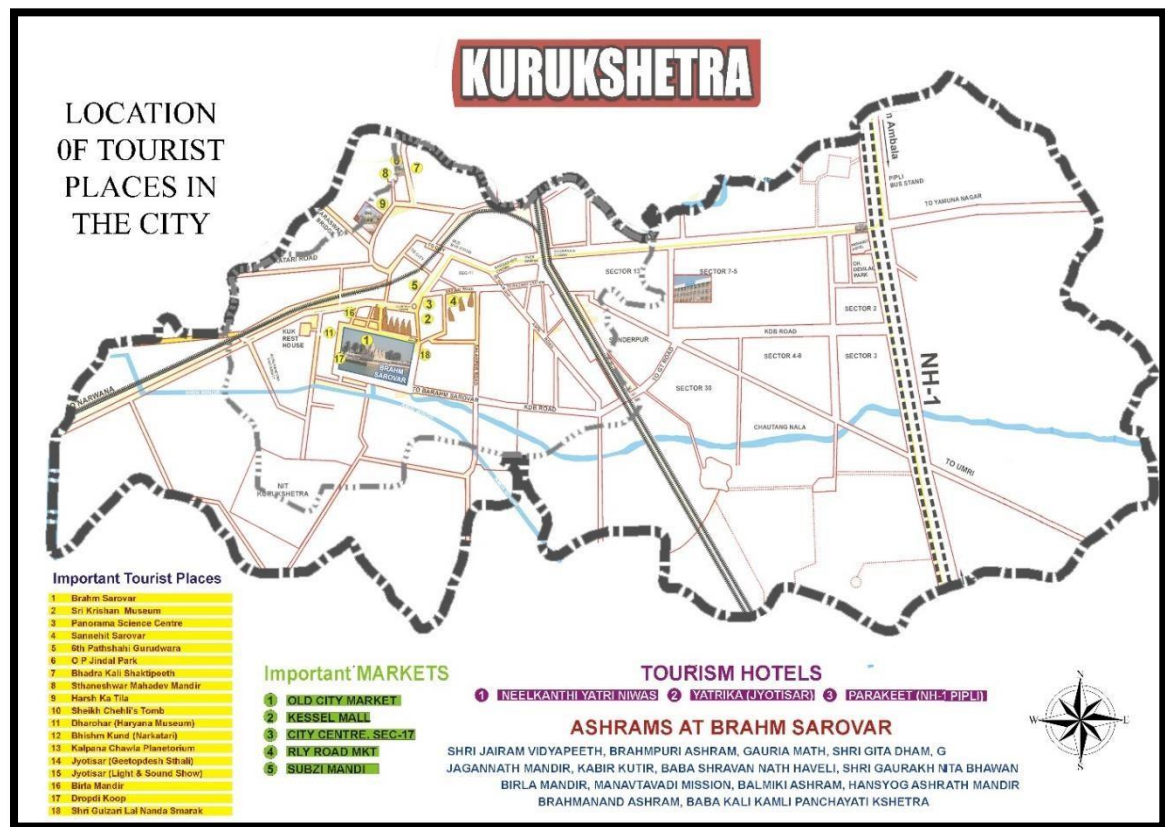


Day -7:

Tourism survey is carried out in order to find facilities provided to tourist at the tourist spots and their level of their maintenance and also find the problems faced by tourists.

Few tourist spots in the city are as follows:

- a) Sheikh Chilly Mansoleum - It is a massive monument with octagonal shape crowned with white marble.
- b) Harsh Tilla
- c) Bhisma Kund at Narkatari - a place where Arjuna shot an arrow towards the earth to quench Bhisma Pitamah's thirst he was laid on arrow bed.
- d) Thaneswar Mahadev Temple - It is the temple of Lord Shiva famous for Shiva Linga. Lord Brahma is said to have laid the first linga of Lord Shiva at this place.
- e) Bhadra Kali Temple - It is the temple of mother Goddess Kali, thousand of devotees through the temple on the holy days of Navratra in the month of March-April and September-October every year.
- f) Kalpana Chwala Planitarium
- g) Krishna Museum
- h) Science Museum
- i) Jyotisar – The place where Lord Krishna gave sermon to Arjuna to fight the evil.
- j) Brahma Sarovar and Sannihit Sarovar – Places are believed to be sites where Lord Brahma- the creator of World as per Hindu philosophy, created the whole world.



Conclusion

With the continued support from both the faculties, the students conducted the surveys efficiently and smoothly. They could visit a number of offices of various departments and received positive response from the officials of these departments. During the survey, they gathered data on Origin-Destination of the vehicles, Traffic Volume Count at different places. Along with the above mentioned surveys, Household and Tourism Survey were also conducted. With this the students could have an overall feel of the town especially in terms of traffic and transportation, street pattern and tourist point of view.

A detailed report on the basis of analysis of the city would be submitted in the form of Comprehensive City Development Plan – 2031 later.

Note: Proformas pertaining to the surveys conducted are also attached with the report in the form of annexures.

Student Attendance

- Punita
- Kavita
- Anjali
- Rahul
- Hitesh
- Franck
- Srinidhi
- Ajay
- Shivendu
- Ritik
- Gayathri
- Tejaswi
- Kenija

ANNEXURES

PROFORMAS OF THE SURVEY'S CONDUCTED

AMITY UNIVERSITY HARYANA
HOUSEHOLD SURVEY - KURUKSHETRA

Date: 18th & 19th March, 2017

Name.....

No. of family members: Male Female

Age (a) 1-14 (b) 14-54 (c) 54 and above

Occupation: (a) Employed (Govt. / Private) (b) Self-Employed (c) Unemployed
(d) Student (e) Home maker (f) Retired

Income (per Annum): (a) < 20K (b) 20K-50K (c) 50K-1L (d) 1L-5L (e) > 5L

Monthly Expenditure.....

Building Age, Use & Condition

Building Height (a) G+1 (b) G+2 (c) G+3 (d) G+4 and above

Housing Typology (a) Detached (b) Semi-detached (c) Apartments (d) Bungalow

Water supply

Source of Water Supply

Quality of Water Supply: (a) Clean (b) Contaminated

Use of Electricity for Water Pumping to HH Overhead Tank: (a) Yes (b) No

Overhead tank Capacity Usage (In days)

Duration of supply (a) 1-4 hours (b) 4-8 hours (c) 8-12 hours (d) 24*7

Expense: (Monthly)..... (Annually).....

Electricity

Duration of electricity Power-cut

Average monthly unit’s consumption Rate per unit

AMITY UNIVERSITY HARYANA
HOUSEHOLD SURVEY - KURUKSHETRA

Sanitation

Toilet Provision: Yes / No (a) Septic tank (b) link with sewage pipe lines **Solid**

waste management

Type of household waste.....

Segregation of HH waste (a) During Collection (b) During disposal at site

Garbage Collection (Mode, Frequency)

Community dust-bins Dumping Site (Location):

Expense: to (a) Private (b) Government Authority (.....)

Transport

No. of vehicles owned: (a) 2-W (b) 3-W (c) 4-W (d) Other

Mode of transport used (a) Private (b) Public

Distance to bus stop or rickshaw stand

Parking Provision: Yes / No (if no, where is the provision for parking))

Daily trip length.....

Origin: Street City Kurukshetra Major Landmark

Destination: Street City Major Landmark

Trip Purpose: (a) School (b) Office/work (c) Shopping (d) Recreation (e) Others

Occasional trip length and frequency of visit.....

Recreation: (a) Park (b) Cinema (c) Museum (d) Temple (e) Others

Problems faced by the citizens and their solution for the problem:

AMITY UNIVERSITY GURGAON

ROADSIDE O-D SURVEY FORMAT FOR _____ VEHICLE

Date of Survey -

Area-

Day of Survey-

S.NO.	Vehicle type	No. of Passenger	Where the trip begin	Where the trip end	Purpose of the trip	Travel time	Travel cost	Frequency of the trip
1.								
2.								
3.								
4.								
5.								
6.								
7.								
8.								
9.								
10.								
11.								
12.								
13.								
14.								
15.								
16.								

Vehicle type	Code
Motorcycle	1
Car	2
Taxi	3
Light commercial	4
Bus	5
Truck	6

Purpose of trip	Code
To work	1
Work to home	2
Other to home	3
Shopping	4
Business (own or employed)	5
School/ Recreational	6
Personal affairs	7
Eat meal	8

AMITY UNIVERSITY GURGAON

ROADSIDE O-D SURVEY FORMAT FOR _____ VEHICLE

Date of Survey -

Day of Survey-

Area-

S.NO.	Vehicle Type	Where the trip begin	Where the trip end	Purpose of the trip	Frequency of the trip	Travel cost	Travel time	Quantity of the goods
1.								
2.								
3.								
4.								
5.								
6.								
7.								
8.								
9.								
10.								
11.								
12.								
13.								

14.								
15.								
16.								

Vehicle type	Code
Tractor	1
Tempo	2
NMT	3
Truck	4
LCV	5

Trip Frequency	Code
Daily once	1
Daily twice	2
Daily thrice or more	3
others	4

TRAFFIC VOLUME COUNT - KURUKSHETRA

Date: 21st & 22nd March, 2017

[illegible]

AMITY UNIVERSITY HARYANA TOURIST SURVEY

SPOT NAME -

DATE-

DAY-

Sr. No.	Origin	Purpose Of The Trip	Age	Mode Of Transport	
1					
2					
3					
4					
5					
6					
7					
8					
9					
10					
11					
12					
13					
14					
15					
16					
17					
18					
19					
20					
21					
22					

23					
24					
25					
26					
27					

INFRASTRUCTURE	YES/NO
COMMUNITY TOILETS ARE CLEAN OR NOT	
DRINKING WATER	
SUFFICIENT SEATING SPACES	
SUFFICIENT GUEST HOUSES	
COST EFFICIENCY OF GUEST HOUSES	
SUFFICIENT PARKING	
SUFFICIENT DUST BINS	

SECURITY	YES/NO
LOCKER ROOMS	
POLICE BOOTHS	
HELP LINE	

FOOD/WATER QUALITY	YES/NO
VERY GOOD	
GOOD	
BAD	
AVERAGE	

PROBLEMS -