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# Imageability of Spaces Imparting Character to a City: Case Study- Raipur

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**Abstract:** *A city can be identified by its open spaces, structures and layout in an area. These patterns are imprinted in its residents' mind, resultant of the resident's living condition, culture, lifestyle, and available resources. These impart an image of city in residents' mind. The urban areas regularly have countless pictures dependent on the particular impressions of related domains of the encompassing forms perceived by individuals depending upon features and elements located and planned in a city. This paper attempts to analyse on what gives a city an image it has today in the mind of its residents. To understand this Raipur is used as case-study. This study analysis the responses of its resident through online and offline primary survey based on their perception and understanding of different elements of Raipur city as described by Kevin Lynch and Edmond Bacon in his model. A stretch of G.E (Great Eastern) Road from Telibandha to Tatibandh has been chosen for the study. About 75 people of age between 16-53 and of different backgrounds were surveyed to understand their perceptions. The study concludes that the elements & spaces plays a vital part in the arrangement of a City's Picture.*

**Keywords:** *City Image, Elements, Perception, Imageability, Identity*

## I. INTRODUCTION

The Image of the city is a result of an observer who either is a resident or a tourist in that city and what he perceives or forms a mental image of any space. "It is an assimilation of observer's filtered perceptual input of related meaning and purpose of constant interacting process based on selection, organization and endorsement, and the distinctions and relations suggested by the environment" [2]. Raipur's current state is resultant of several transitions it has gone through since history. The growth of the city is achieved through various kingdoms and later by the development authorities. Raipur has public spaces that are thriving since the known history and which is popular in its residents' mind. The places like Jaistambh Chowk, Ghadi Chowk has become an identity for Raipur and act as tourist attraction and provides the insights regarding the city life. Perspective towards any public space plays a vital role in forming an image of a space, in the minds of user and to decide whether they want to be a part of it or not. The image of city is more than the reality and sometimes it could be misleading too in the mind of the user resultant of changes and transformations of several spaces within the city in due course of time. The planners as a manipulator and transformer of physical environment and the image are primarily concerned with the extended agents of interaction, to create a common mental picture carried by large number of inhabitants, ignoring the individual differences [2]. In simple words, Image of city is people's perception based on their mental image of any space organized around set of routes or focal points or named regions as categorized by Kevin Lynch [2] as paths, edges, nodes, landmarks and districts. Any public image is combination of several small individual overlapping images. Lynch characterized any image formation elements into five different physical components: Paths, Nodes, Districts, Landmarks and Edges. Paths incorporate the streets, roads framework, walkways, travel lines, and so on the courses or channels along which individuals or spectator possibly, sometimes, or generally moves. These are an overwhelming component of imageability for the majority of individuals. Individuals notice the city while traveling through it, and along these ways the other natural components are organized and related. Nodes are the places of the escalated foci along the paths in the city through which any person is travelling. They are the essential spots in the city into which he can enter, and are fundamentally the intersections or union of the paths, spots of break in the transportation, moments of move starting with one onto the next, and so forth. They are simply the concentration points which have their physical & historical importance. Whereas Districts are those sections of the city having two-dimensional degree for the most part. They are recognized by elements having common characters which are recognizable. People identify or represent their city based on either districts or paths, where the observer mentally enters "inside of". It has some recognising characters. Landmarks are the reference places which an observer sees or keeps an image in his mind, where usually he does not enter and are normally characterized highlights or actual items like structures, signs, mountains, movement focuses, some strangely great articles, and so forth a few milestones may likewise have directional boards etc. And Edges are the direct elements not utilized or considered as ways by the onlooker. These are the limits between the two spaces or paths, abutting the ways or between two ways, straight break like cuts, edges of improvement, dividers, actual hindrance like mountain or shores, and so forth they might be penetrable through breaks and so on.

Urban form in general is the physical shape and structure of the city or built environment around us. It is comprised of visual images of the cities, experiences, feelings, memories of place, thoughts and intellectual constructs anchored in the realm of art and humanities [3]. The advancement of urban form is a result of arbitrary development of settlements throughout the period of time, which in large case are spontaneous and unguided and developed non-uniformly. Some planned cities like Chandigarh, Ahmedabad, Gandhi nagar and even Nava Raipur (Atal Nagar) were developed after imagining the urban fabric of the space, but that too failed due to the changes in social and economic life and further by lifestyle of people residing in that city. Since image development is a two-way process between observer and observed, it is possible to strengthen the image either by symbolic devices, by the retraining of the perceiver, or by reshaping one's surroundings [2].

The paper talks about the visual components of Raipur city and its imageability according to different elements of the image development as portrayed in the works of Kevin Lynch with special reference to his book "The Image of The City". The paper initially talks about the imageability components and after that analysis of responses about the imageability of G.E Road of Raipur city based on different elements, supported by surveys and interviews of the residents of Raipur city or who have visited Raipur. After that point, the paper concludes with rundown of the serious issues and inconsistencies in the urban form and style influencing the imageability in present setting. What spots does the backdrop of G.E Road (Telibandha-Tatibandh) has in our heart that keeps us associated with Raipur.

#### A. Aim and Objectives

This study aimed to understand the Kevin Lynch concept of "Image of the City" in current times taking Raipur city as case-study area. It tried to define different elements in the city which plays important role in imparting an image. The objective of this study to identify components in Raipur city that helps and confers character to its spaces and to learn about different elements that helps in forming the image of the city.

#### B. Research Method

The research methodology involves the development of mental maps of the spaces along with collection of data through primary survey of 75 respondents both online and offline. The survey included imageability questions related to Raipur city along with the formation of mental maps which a user would imagine about the stretch of G.E Road. After surveying, an analysis was conducted to refer most of the prominent elements that users think are and several maps were generated. Questions like prominent landmarks, nodes and paths used to travel along the path along with distinctive features were asked.

## II. PLANNING OF THE CITY

The city of Raipur is located 21.2514° N, 81.6296° E coordinates at an average elevation of 298.15m founded by King Ramachandra's son Brahmedeo Rai. It is now the capital city of central state of Chhattisgarh and has seen various transitions since the past. The Raipur city initially was a walled city but as time passed away only remains are left with two of the entrance's gates near the present Jai Stambh Chowk. The city expanded from a focal point towards the outwards as seen in Fig 1. The city now has various Paths or routes, out of which one of the prominent routes is the G.E Road.

The G.E Road has seen the transition of history from its older times since we can see various historical spaces as well as today's modern structures in and around the route. Starting from Telibandha till Tatibandh this 11.9 km stretch has various nodes, various subordinate paths, various Public Spaces, Commercial Areas, Universities, Religious etc. Prominent market and shopping spaces which are more than 200 years old "Gol-Bazaar" also lie in this stretch. Another example is Rajkumar College which is almost 150 years old school lying in this stretch. It can be termed as this stretch serves as a backbone for this city and people travelling from one point of the city to the other has to mostly cross this route from one or the other nodes or junctions.



Fig. 1 G.E Road

(Source: <https://wikimapia.org>)

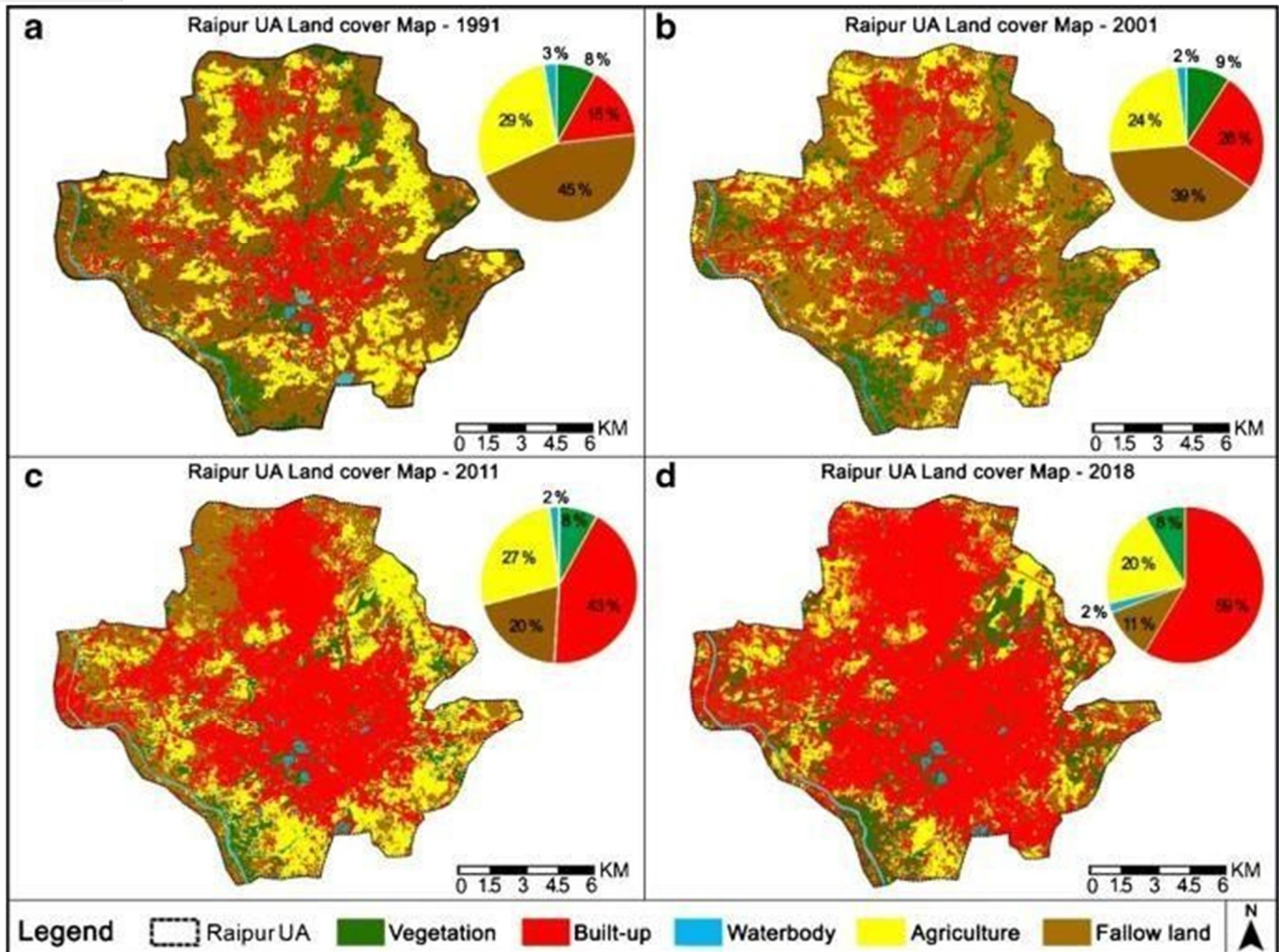


Fig. 2 Example of an image with acceptable resolution

(Source: <https://link.springer.com/article/10.1007/s12517-020-05693-0>)

It can be analysed from Fig. 2 that how the built-up has increased from 1991-2018 in non-uniform pattern towards all of the directions and since G.E Road passes through center of city as shown in Fig. 1 it serves as the main road in the city and people travelling via this route can create an image of the whole city because of the prominent elements encompassing this route, from a well-developed street like the Gaurav path towards an old junction of the city Jaistambh Chowk, leading towards Tatibandh with well landscaped trail of the city.

### III. ELEMENTS OF URBAN FORM AND ITS IMPACT ON IMAGEABILITY

Using analytical methods, the designer could proceed to develop a visual conceptual plan at the city scale, whose object would be to strengthen the image of the city. Based on different elements as described by Kevin Lynch and model created as of three cities Boston, Jersey City and Los Angeles, similar model is developed by understanding and analysing all of the elements as per Raipur city and marking out all of the elements at different scales. These shaping's or reshaping's is guided by what might be called a "visual plan" for the city or metropolitan region: a set of recommendations and controls which is in concerned with visual form on the urban scale [2].

G.E Road has several arterial roads connecting at several nodes or junctions like Atal Expressway, Canal Linking Road, Bhagat Singh Chowk, Ghadi Chowk, Jaistambh Chowk, Tatyapara Chowk etc. After interviewing and surveying respondents (About 75 people both online and offline), the places which were most commonly being used were marked and elements helped in creating an image of the city was noted. Elements like Make in India Lion, Aeroplane and Shivaji statue at Tatibandh chowk, Army Tankat Anupam Garden, Skywalk etc. helped in creating imageability of these spaces in the user's mind.

### A. Paths

Paths as described by Kevin Lynch. forms the fundamental division arrangement of spaces in planning of the city. Similarly, G.E Road serves as the major backbone of the city. At G.E Road, arterial roads are connected predominantly at right angles except for few spaces like the canal linking road and junctions of Hirapur Road and Gudhiyari Road. This stretch of 11.9 Km has few of the prominent pathways serving as the secondary roads to the city. From the survey it came into conclusion that Shankar Nagar road, Canal Linking Road, Sadar Bazar Road are most commonly used paths for reaching G.E Road.

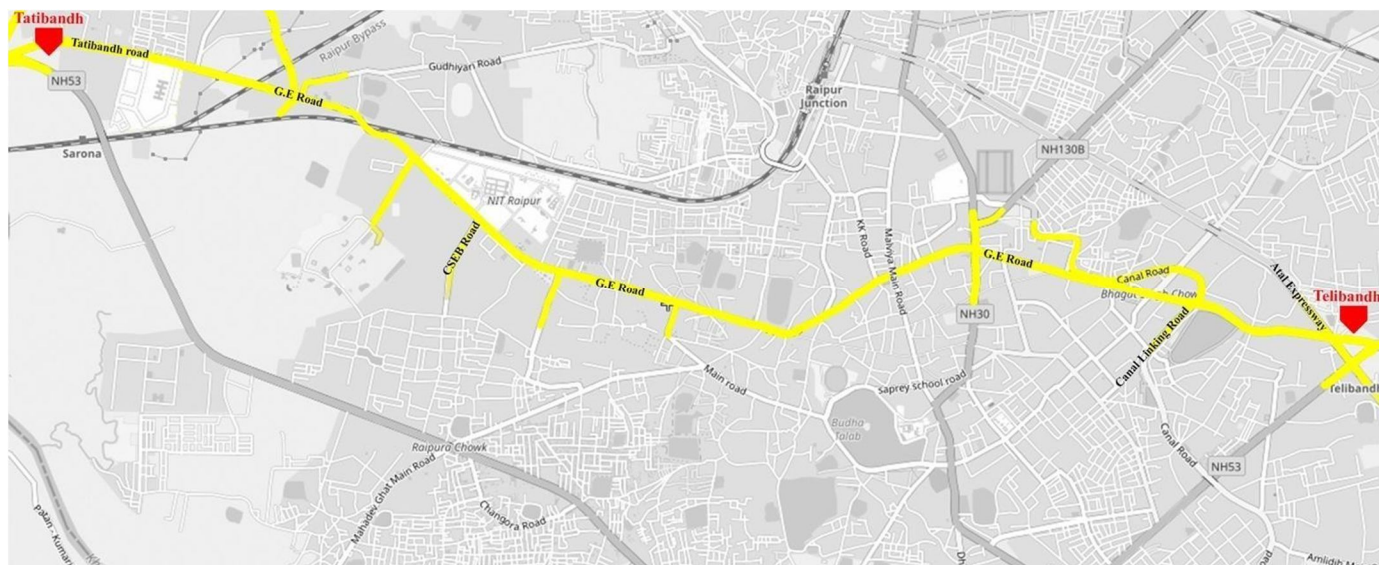


Fig. 3 G.E Road and its arterial paths

(Source: Author)

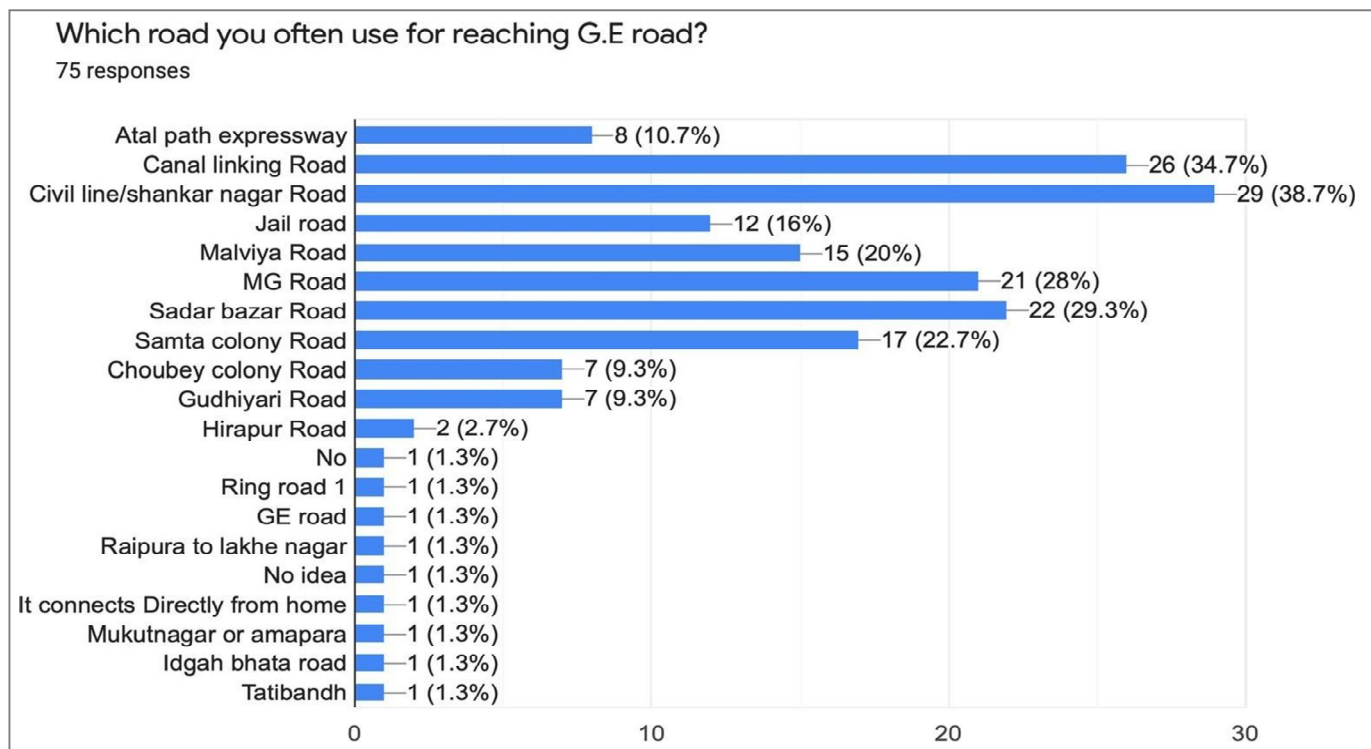


Fig. 4 Paths used for reaching G.E Road

(Source: Author)

**B. Nodes**

Nodes are the major junctions on any roads. Several nodes or junctions are present in this stretch which serves as a focal point and which are analysed and found to be in organic pattern, with built form originating in all directions. Any traveller travelling from one point of the city to other has to cross one of the nodes along the path. These nodes are very important in the given stretch. Important nodes that are present in this stretch are: Bhagat Singh Chowk; Ghadi Chowk; Jaistambh Chowk; Sharda Chowk; Tatyapara Chowk; Amapara Chowk; Ashram Chowk; Amanaka Chowk etc.

From the survey it is found that almost half of the people crosses three of the main nodes at G.E Road, Phool Chowk, Jaistambh Chowk, Ghadi Chowk and the least which people does not travel via are Bhatagaon Chowk and Shankar Nagar Chowk. These nodes are prominent because of their historical importance, like Jaistambh Chowk was once when considered to be the centre of Raipur city so all of the major routes are along its cardinal directions. Majority of the names of these nodes are due to presence of any such physical elements or any particular group of activity. For example, Ghadi Chowk is named due to presence of a clocktower in that junction similarly, Phool chowk is termed because of several flower shops in that place selling flowers since long back.

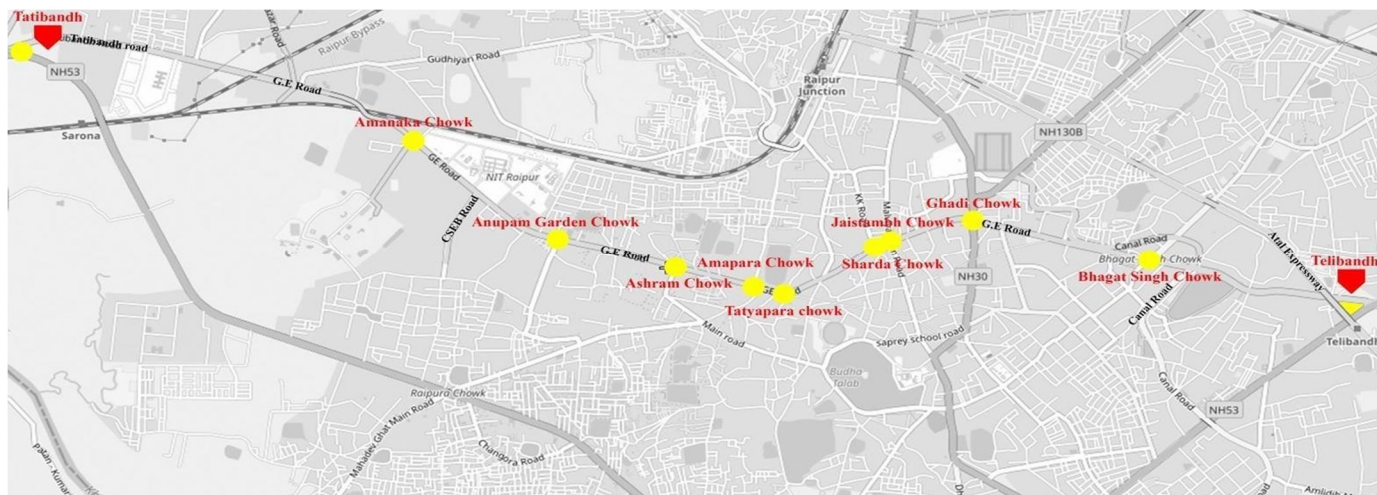


Fig. 5 Major nodes at G.E Road (Source: Author)

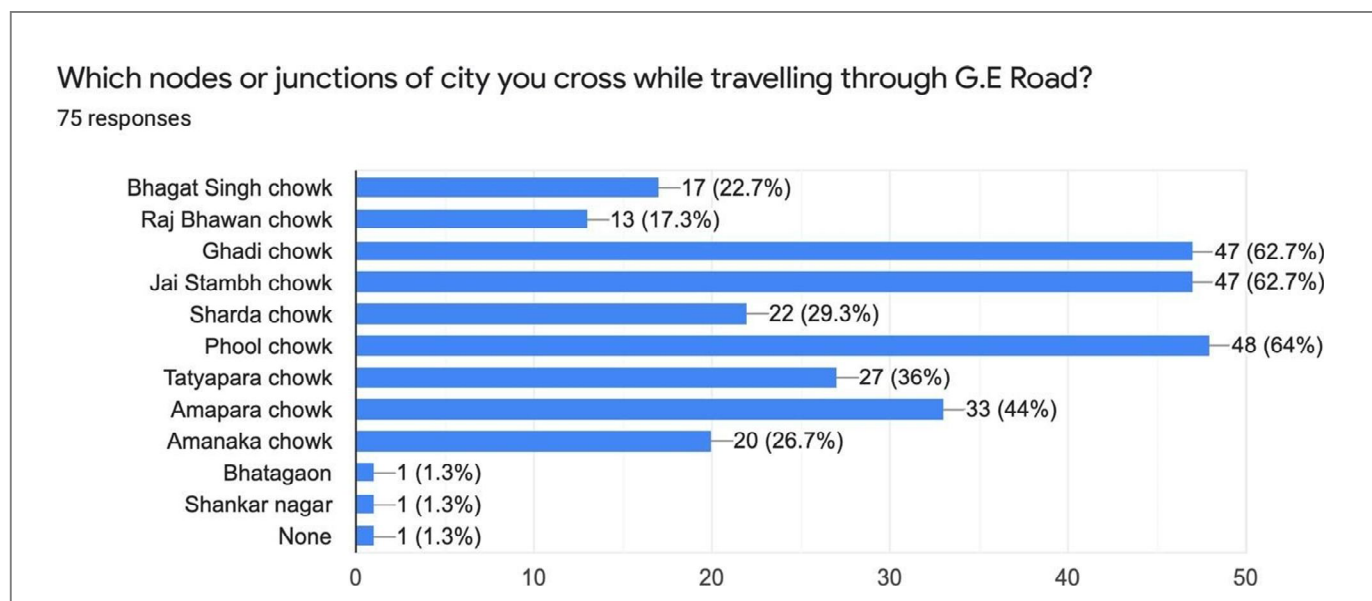


Fig. 6 Nodes crossed while crossing G.E Road (Source: Author)

**C. Districts**

Districts as described by Kevin Lynch are the spaces having two-dimensional degree. In today’s context it is termed as sectors or zones in the city. At G.E Road, on both the sides we can see several prominent areas which have seen transition of this stretch through time. Two spaces namely; Gol Bazar and Purani Basti are 200 years old. There are several other typologies like Residential, Commercial, Recreational etc. along the stretch of this road. Prominent districts that are present in this stretch are: Telibandha; Anand Nagar; Civil Lines; Samta Colony; Choubey Colony; Dagania; Jyothi Nagar; Tatibandh etc.

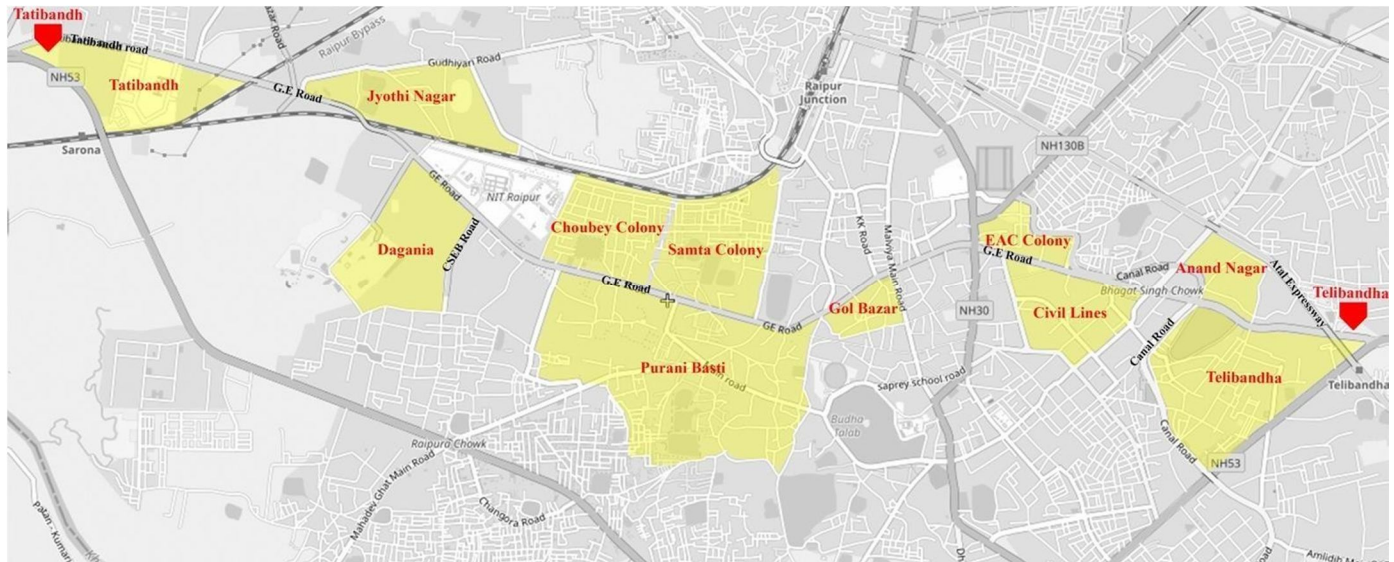


Fig. 7 Major Districts(Source: Author)

**D. Landmarks**

Landmarks are the reference spots or spaces or any structure which helps in identification of any place and also act as nodal point of reference in any city. A user travelling from Telibandha towards Tatibandh or vice versa can refer to several landmarks depending upon his perception towards the city. Spaces like Telibandha Talab, Gol Bazar are most prominent landmarks, which almost every residents or visitor of this city can imagine. Major landmarks that are present in this stretch are: Make in India Lion; Telibandha Talab; Gandhi Udyan; Collectorate; Ghadi Chowk; Shahid Smarak Bhawan; Jaistambh Chowk; Gol bazar; Phool Chowk; Anupam Garden; Oxy Reading Zone; NIT; AIIMS etc.

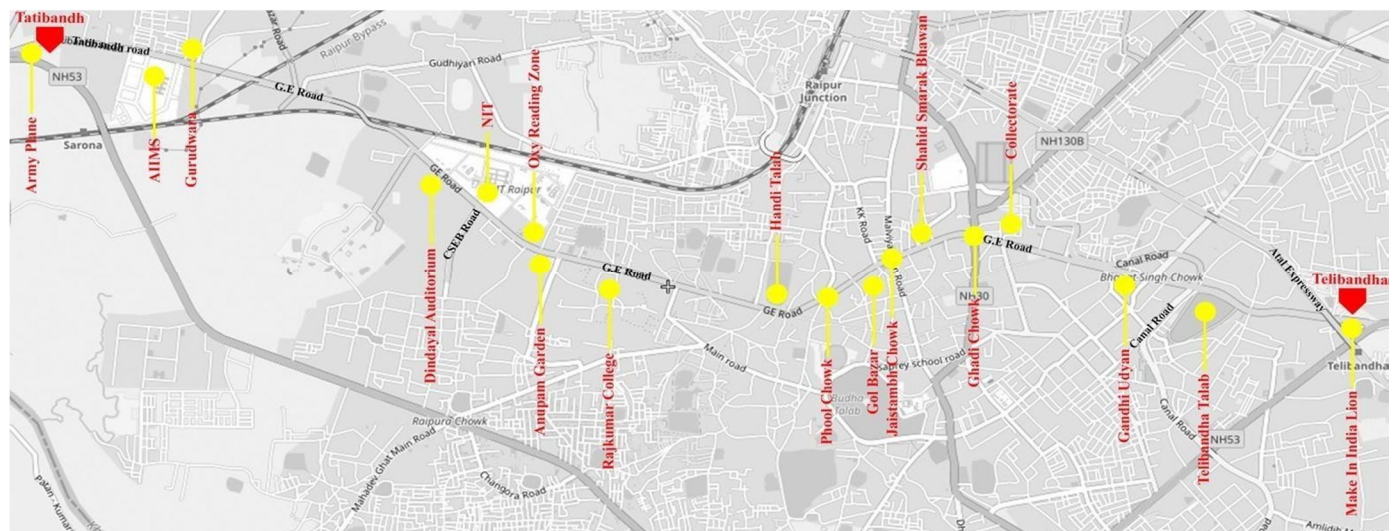


Fig. 8 Major Landmarks at G.E Road

(Source: Author)

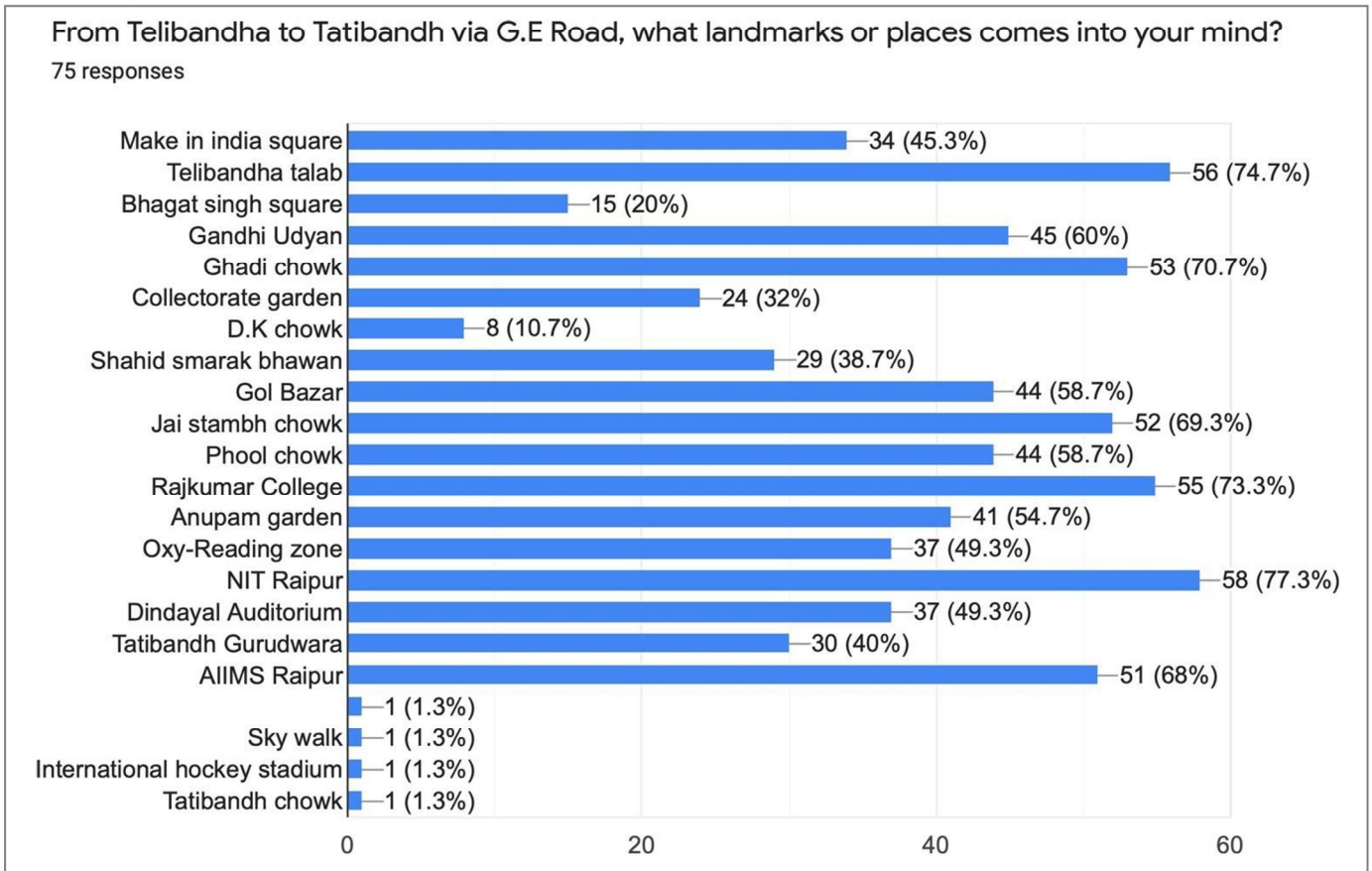


Fig. 9 Major Landmarks at G.E Road  
(Source: Author)

E. Edges

Edges are limits between two spaces or simply it's a visual boundary. At G.E Road, we have distinguished edges which adds to the urban fabric. Though most of the stretch is occupied by shops and commercial areas on both sides, still some spaces like the Telibandha Talab, Railway Crossing near the Tatibandh, Gaurav Path etc. helps the residents or visitors to create a mental image of this city.

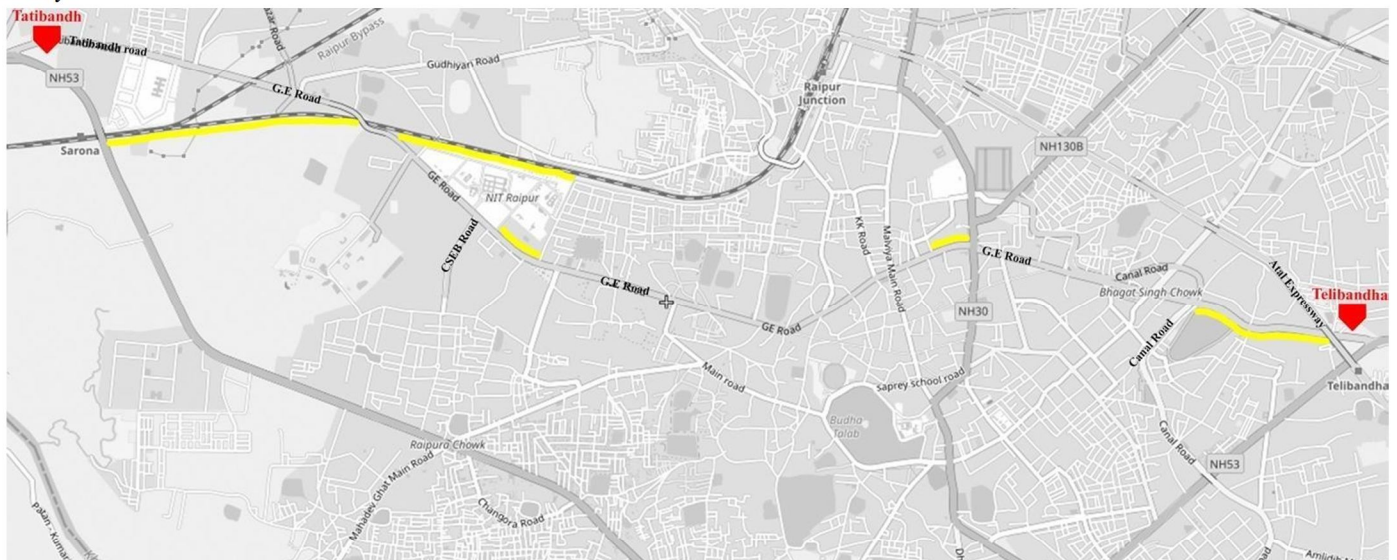


Fig. 10 Edges (Source: Author)

#### IV. VISUAL FORM OF G.E ROAD

After studying and analysing several elements as described by Kevin Lynch in his book, and after the survey, marking out a similar visual form (to that of three city visual forms created by Kevin Lynch), of my case study G.E Road was created with all the elements (Path, Edge, Node, Landmark and District) marked out which a user can imagine while travelling via G.E Road from Telibandha towards Tatibandha.

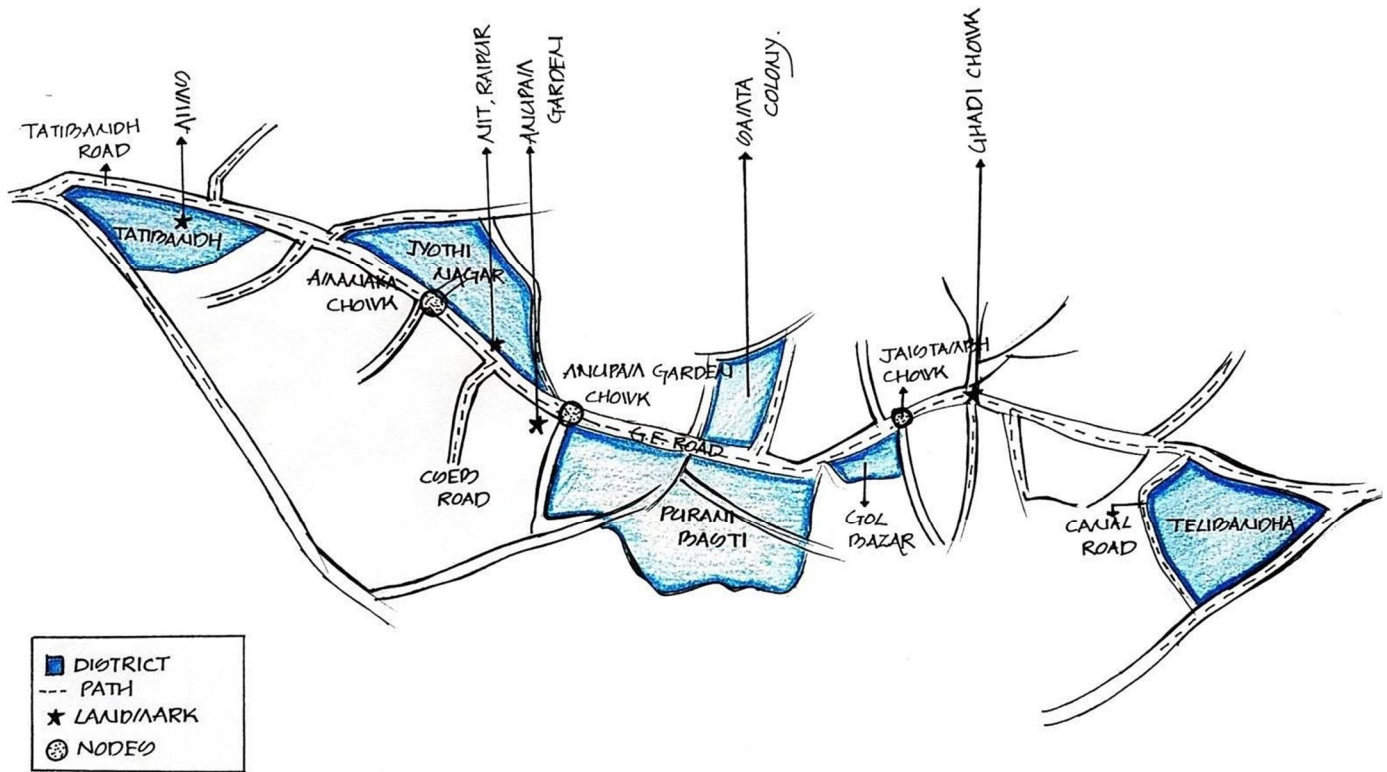


Fig. 11 Mental map of G.E Road (Source: Author)

#### V. CONCLUSION

The stretch was not properly planned from the start and has been developed in phases and grown organically with respect to requirements and necessity of the residents over a long period of time. The spaces around the road shows significant architectural characters at several points. Apart from all the physical elements, the tradition and culture of this region plays an important role in imageability and identity of this road. Some of the major processions like Ganesh Jhanki, Mahaveer Jayanti etc. are part of this road and is carried out from this major road only. The improvement and extensions of this road both volumetric and spatial especially post-independence has not been given much consideration while planning in initial times, we can see collectorate building, Rajkumar college and many such structures constructed in British era. However, there is no particular design or approach followed to develop recent buildings hence it fails to construct a significant urban fabric across the road. Using Kevin Lynch's "Image of City" using several physical elements, any part of the city or a city as a whole can be visualised and mental maps can be created. Several elements of the city hold a special place in the minds of the residents of that city based on his perception. While travelling via G.E Road and after analysing about the stretch, residents also faces some problems while forming an Image of the city due to irregularities or stopped constructions etc. The major problems in imageability of city can be summed up as follows:

##### A. Lack of Proper Development Regulations

The construction along the stretch does not contribute to a single architectural style as we can see several types of structures ranging from commercial complexes like Ravi Bhawan, multilevel parking, NIT, AIIMS, Oxy Reading Zone, etc. so the whole stretch has mixed land use and architectural character and forms. Structures are being built along the heritage structures like at Ravi Bhawan, where an original gate built in 18<sup>th</sup> century is merged with a commercial complex rather than been conserved properly.

*B. Lack of heritage conservation & Preservation*

This road has two prominent and old spaces of this city, the Gol Bazar and the Purani Basti which are the commercial and the residential spaces. Both of the spaces have several heritage spaces, but have been left unseen and unpreserved, resulting in the loss of architectural beauty, aesthetic and cultural significance of the space.

*C. Urban sprawls*

Many major urban sprawls can be seen towards Tatibandh, new spaces Oxy Reading Zone, Auditorium, International Hockey Stadium etc. are being created. however, lack of open spaces along the stretch, has limited Planners intervention to a greater extent.

*D. Current development work*

The stretch of 11.9 Km has been developed in several phases and have sifting ideologies along its development. One of the major additions is the construction of Sky walk since past four years with stalled construction and no foreseeable future and alternative use giving negative image to this stretch.

*E. Urban Fabric and vista*

Most of the stretch along the road is clean but between Ghadi Chowk and Amapara, it requires maintenance and redevelopment.

The Ghadi chowk to Make in India Chowk stretch is visually appealing.

A city canvas changes after several years of growth, the character of any space changes but some glimpses of the initial ideology remains there. Any public space plays an important role in the image of the city. Landmarks and nodes are most important element of any city and needs to be composed well as one gets conscious at those points and these points are of sudden decision making and landmarks are the identification points. After this research survey it can be concluded that Raipur in terms of all such factors serves to be a good place where its residents have a clear image of their city and its elements which imparts character to this place.

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