

Spring 5-16-2014

## Contested Road Space: Public Narratives and Bus Rapid Transit in Indore, India

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Contested Road Space:  
Public Narratives and Bus Rapid Transit in Indore, India

A Thesis

Submitted to the Graduate Faculty of the  
University of New Orleans  
in partial fulfillment of the  
requirements for the degree of

Master of Urban and Regional Planning  
Transportation Planning

By

Lucien V. Bruno IV

B.A. Tulane University, 2008

May, 2014

## **Acknowledgements**

I would like to thank my committee – Kate Lowe, Anna Brand, and Stefan Marks – for their guidance and support during the evolution of my thesis. I would also like to thank my professors at the University of New Orleans for sharing their insight and knowledge during the course of my masters program: Kate Lowe, John Renne, Anna Brand, Earthea Nance, David Gladstone, Steve Villavaso, Lynn Dupont, Carol Short, Patrick Haughey, and Michelle Gremillion.

Thank you to EMBARQ India and the Dwight David Eisenhower Transportation Fellowship for supporting my research and making my trip to India possible. A special thanks to my EMBARQ supervisor Arnab Roy for putting up with my constant requests for more information on project updates.

Last but not least, I would like to thank my friends and family for their love, support, and well-meaning promises to one day read my thesis.

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## **List of Abbreviations and Terms**

BRT	Bus Rapid Transit
BRTS	Bus Rapid Transit System
DPR	Detailed Project Report
HT	Hindustan Times
iBus	The name of Indore's BRT service
JnNURM	Jawaharlal Nehru Urban Renewal Mission
NMT	Non-Motorized Transport
PMV	Personal Motor Vehicle
TNN	Times News Network

## **Abstract**

Bus Rapid Transit (BRT) has a demonstrated capacity to improve safety, mobility and accessibility for multiple types of road users. In India, where road safety is an ongoing problem, the national government has supported cities' efforts to implement BRT as a cost-effective tool to improve urban travel. The case of Indore's iBus attests to the cultural and institutional barriers that Indian cities may face in gaining public support for BRT. After a contentious implementation process, the High Court ruled to open the dedicated bus lane to private automobiles, resulting in drops in ridership and increases in accidents and travel delay. This study examines the competing, public narratives that framed the issues during and after project construction. Contested notions of the public interest, the cause of traffic problems, and community participation informed the basis for the arguments that culminated in the court ruling.

**Keywords:** Bus Rapid Transit; India; Indore; Project Implementation; Road Safety; Public Interest



## **1. Introduction**

In May of 2013, Indore, India saw the launch of iBus, its first bus rapid transit (BRT) system along 11.4 km of a major traffic corridor. The construction period, rife with project complications, lasted nearly six years and led to a contentious implementation process. Plans called for a fleet of 50 buses, which would carry a projected daily ridership of 70,000. Although the project acquired necessary funding for the fleet, after four months of commercial operations the system was operating with only 18 buses and an average daily ridership of 30,000. Following the installation of the dedicated bus lane, media reports reflected the frustration of various groups who believed the BRT had exacerbated traffic conditions. A suit brought forth by civic activists culminated in a High Court ruling that allowed private cars to operate in the dedicated bus lane. Following was an immediate decrease in ridership and an increase in accidents and travel delay.

This case study reviews the competing, public narratives that framed the implementation process and court proceedings of the BRT. In analyzing the arguments of both detractors and proponents of the system, I found fundamental differences in the foundation of each side's argument based on their interpretation of contested themes. While BRT supporters stressed the potential, future benefits that the system could afford all road users, those who fought the BRT did not believe that the low level of transit ridership warranted a dedicated bus lane. In presenting and depicting traffic problems on the corridor, those arguing against the BRT placed blame on the dedicated busway as the main culprit. Meanwhile, those arguing for the BRT claimed these problems were ongoing and often framed them as an opportunity for improvement through BRT operations. Finally, although both sides agreed that the implementation process lacked adequate public participation, opponents used this as justification for suspending the project while supporters saw it as an opportunity for improvement.

Media narratives presented arguments from both sides and also described accounts that were representative of the successes and failures of the system. News articles served as an arena to present contested facts. While some were unfounded or required clarification, they all were published and therefore had the opportunity to influence the perceptions of the public and officials. English-language news articles reviewed during the study period were more likely to depict negative attitudes than positive ones as they related to the BRT. These portrayals included statements from public officials as well as members of the public. Titles of the articles that reported on the BRT were also more likely to carry a negative tone. For policy makers and practitioners, this case study shows: the capacity of public perception to affect project outcomes; the importance of public participation before, during and after project implementation; the opportunities and barriers to improving road safety where traffic enforcement and safe travel behavior are lacking; and the role of media in framing events, attitudes and opinions.

In chapter two I examine the literature as it relates to: the state of India's transportation infrastructure and travel behavior, the opportunities and challenges to implementing BRT within Indian cities, and the problematic nature of defining the public interest. In chapter three, I outline the methods of the case study, including: discourse analysis of court-related documents, analysis of news articles, and my role as participant-observer. In chapter four, I present the background information for the area of study, including: demographic trends, travel mode share, BRT project objectives and the project timeline. In chapter five I present my findings. Overall, I found that groups arguing for and against the BRT had conflicting interpretations of the public good, the cause of traffic problems, and public participation. I also found that news articles reporting on the BRT were more likely to portray negative attitudes from public figures, citizens, and in the

article titles themselves. After discussing the implications of my findings, I conclude in chapter six with lessons learned.

## **2. Literature Review**

### **2.1 Introduction**

This literature review analyzes the capacity of BRT to improve safety and efficiency along India's urban corridors. Being that the culture of transportation in India is largely distinct from the rest of the world, this review also analyzes its state of infrastructure, travel behavior, and law enforcement to demonstrate both the potential improvements that BRT offers to cities but also the threats that such conditions may pose to a successful BRT in the Indian context. Furthermore, and considering India's position as a pluralistic democracy, this review explores the conflicts and opportunities that may arise through the public planning process and how these dynamics may affect BRT's ability to foster transportation equity, safety and efficiency in India's urban centers.

In the first section, I give an overview of the state of transportation in India. In the next section, I explore best practices for BRT and analyze studies that demonstrate the effects of BRT on safety and efficiency among various case studies. In the third section, I examine relevant literature on the public interest, the construction of expert knowledge, and the capabilities and restraints within public participation to affect equitable outcomes.

### **2.2 India's State of Transportation**

Most literature addressing India's state of transportation refers to it, in one way or another, as a crisis (Pucher, Korattyswaropam, Mittal, & Ittyerah, 2005; Kim & Nangia, 2010; Hossain, 2006). Inadequate infrastructure, rising motorization, unsafe travel behavior, and lack of law enforcement are a threat to not only public health (Pucher et al., 2005), but also to the national economy and the social welfare of residents (Kim et al., 2010). Pucher, Korattyswaropam, Mittal, and Ittyerah (2005) present an overview of India's culture of

transportation, outlining problematical trends that also pertain to Indore, namely: rise in congestion and vehicle ownership, inadequate accommodations for buses and non motorized transport (NMT) users, crumbling road infrastructure, poor traffic control/signals/signage, rising fatalities among pedestrians and motorcyclists, poor public transit, rising air pollution, lack of enforcement and lack of adherence to road rules. The authors claim that increased vehicle ownership is the main reason for the rise in road fatalities, more than half of which are among pedestrians and cyclists.

According to Mascarenhas and Chaudhary (2012), Indian travel behavior and transport infrastructure is unique even among developing countries. Among the unique characteristics that present challenges to transportation planners are: a heavy mix of motorized travel modes with an especially high share of motorcycles and scooters; a variety of NMT modes, including bicycles, tricycle wheelchairs, vendor carts and push carts; heavy pedestrian volumes; lack of adherence to road rules with a lack of law enforcement; high density of roadside development on major arterials; abundant street vendors and other road obstructions; and the dominance of auto-rickshaws as para-transit, i.e., a flexible mode of transit with non-fixed routes. The resulting environment is one in which corridors are congested and where the most vulnerable of mode shares (cyclists, pedestrians, etc.) must fight for space on the same roads as motorized vehicles.

A major theme from the existing literature is the vulnerability of pedestrians, cyclists and other NMT users on Indian roadways (Advani & Nisha, 2013; Pucher et al., 2005; Tiwari & Jain, 2012; Verma, Velumurugan, Chakrabarty, & Srinivas, 2011). In many cases, this vulnerability is due to a complete absence of sidewalk facilities (Pucher et al., 2005). Among sidewalks that are present, many are plagued by obstructions, debris, open manholes, disrepair and non-uniform heights. A recent study by Advani and Nisha (2013) found that, among pedestrians walking in

the road, those surveyed reported to make their choice “due to the higher level of footpath (30%), presence of dust (28%) and uneven surface of footpath (23%)” (p. 45). Along with the poor provision of infrastructure, a general lack of adherence to road rules and enforcement of traffic laws compromises the safety of all road users, but especially for pedestrians, cyclists and those on motorized two-wheelers (Verma et al., 2011). In their study on driver licensing procedures and traffic law enforcement, Verma, Velumurugan, Chakrabarty, and Srinivas (2011) attribute dangerous travel behavior to drivers operating without licenses, inadequate licensing procedures, a disregard for road rules, a lack of personnel for surveillance and enforcement for traffic violations, and corruption among the police force coupled with a willingness among drivers to bribe officials instead of paying full fines. The authors’ recommendations based on the ‘three E’ road hazard countermeasures, “education, engineering and enforcement” (p. 1375), hold broad implications for the capacity of BRT implementation to foster safer traffic corridors in the Indian context.

Kim and Nangia’s (2012) comparative study of India and China’s national infrastructure sheds light on the current state of India’s transportation infrastructure. It also explores the political factors they claim to have contributed to the nation’s poor provision of road networks. In comparing it to China’s method of anticipating demand, they argue that India’s national philosophy of infrastructure provision as a social service during a critical growth period was detrimental to the economic welfare of the nation. In assessing the deplorable condition of India’s transportation networks, they argue that it is not only a threat to the economy (e.g., hampering trade) but also to safety and community welfare (e.g., access to basic goods and services). While they attribute this current condition to a technocratic, top-down planning

process, as opposed to a more political one, they claim that Indian officials have begun to adopt more promising strategies to address the underserved transportation needs of the nation.

### **2.3 The Capacity of BRT to Improve Safety and Efficiency**

As part of the Jawaharlal Nehru National Urban Renewal Mission, India has seen an increase in the development and implementation of bus rapid transit systems (BRTS) within its major cities. While a BRTS may involve varying levels of operational and design components, this paper will define the characteristics of a full-service BRT and assess the influence of each on different travel indicators (road safety, mobility, accessibility) based on various case studies. Being that the initial design and operation of Indore's BRT iBus most closely resembles that of a full-service BRT, the findings of these studies are helpful in assessing the iBus's potential to positively or negatively affect the previously discussed problems with India's state of transportation.

According to the Federal Transit Administration (FTA) (2009), a high-performance BRT operates on a dedicated bus lane designed to "minimize the number of at-grade intersections" and "generally feature[s] amenities more commonly associated with rail systems, including high quality permanent stations, level-boarding, off-board fare payment, and stylized vehicles" (p. 4). The purpose of a dedicated bus lane with limited at-grade crossings is to minimize the interaction between different modes of transportation. This design is intended to maintain the safety of all road users while facilitating less impeded, reliable transit service. The presence of "high quality permanent stations" serves to provide a safe, comfortable environment where passengers can wait for the bus, protected from the elements and vehicular traffic. Level boarding facilitates shorter stop times and safer, more accessible passenger boardings, being that there is no need to

climb stairs. Finally, off-board fare collection also contributes to shorter stoppage times, allowing passengers to pay before the bus arrives and then board all at once.

Along with the aforementioned qualities, several studies point to the potential benefits that BRT implementation offers to pedestrians, cyclists, and other NMT users in the form of auxiliary, corridor-wide improvements (Estupiñán & Rodríguez, 2006; Jian, Zegras, & Mehndiratta, 2012; Rodríguez, Brisson, & Estupiñán, 2009; Tiwari & Jain, 2012). Being that the installation of BRT facilities often requires substantial road construction, it allows for the opportunity to improve or install walking/cycling facilities where they may not have existed before. A study by Estupiñán, Brisson and Rodríguez (2009) found a positive correlation between increased walking activity around Bogota's BRT stations and segment-level features, e.g., widened sidewalks and the presence of trash cans. These findings support the argument that specific, ground-level characteristics can facilitate safer traffic corridors by influencing pedestrians to walk in the sidewalk. Jiang, Zegras, and Mehndiratta (2012), see the implementation of BRT as an opportunity to rethink the size of pedestrian catchment areas surrounding BRT stations. Their study in Jinan, China found a positive relationship between people's willingness to walk farther to BRT stations and the presence of certain physical elements along given corridors, e.g., shade and median stations. The implication of these findings are pertinent to policy makers who wish to boost transit ridership and improve walkability through the implementation of BRT.

Tiwari and Jain (2012) found improved accessibility and safety indicators for pedestrians and cyclists along Delhi's BRT corridor. Employing new performance indicators that focus on the movement of people as opposed to individual vehicles, the authors demonstrated that the total travel time saved by all road users along the BRT corridor was 19.7% during a traffic count



survey in 2008. Their analysis also showed a decrease in travel time for cyclists and an increase in the catchment area for pedestrians, most likely due to the improved bicycle and pedestrian infrastructure that was coupled with BRT construction.

Being that India leads the world in annual traffic fatalities (Mascarenhas & Chaudhary, 2012), the capacity of BRT to positively impact safety indicators on busy traffic corridors is especially pertinent to this case study. According to Bocarejo, Velasquez, Díaz and Tafur (2012), “The ability of BRT to deliver a high-capacity system at a relatively affordable cost and with short construction times is well documented, but its effect on road safety has only been marginally discussed and is certainly not one of the main advantages considered by policy makers around the world” (p. 1). In analyzing the effects of BRT on road safety in Bogotá, the authors found a large reduction in serious accidents along two study BRT corridors, at a higher rate than the city as a whole. However, a location-based analysis of crash data revealed the emergence of new hot spots, mainly around busy stations. Part of the problem in some segments was due to improved road surfaces and decreased congestion, thus allowing cars to speed. The authors conclude that although BRT has the potential to improve overall safety along a given corridor, it is vital that planners take special consideration to design for the “special characteristics of pedestrian behavior” (p. 6).

Duduta, Adriazola, Hidalgo, Lindau, and Jaffe (2012) assessed the road safety impacts of varying BRT design features among different cities. They found that Guadalajara’s BRT decreased monthly collisions by nearly 50%, while Bogotá’s Transmilenio reduced fatalities on its BRT corridors by 60% (p. 10). While the Tiwari report found an increase in overall safety along Delhi’s busway, this study found that fatal crashes in 2010 were nearly double the annual average, with the most frequent occurrence being pedestrians run over by buses. Although

Delhi's system lacks the raised, protective barrier that is typical to other, full-service BRTs, this finding brings up important concerns as they pertain to the applicability of BRT in the Indian context. Though the presence of guardrails will likely deter many pedestrians from unsafely entering the busway, those on foot may still opt to climb over the barrier if they do not wish to walk to a designated crosswalk (Mascarenhas & Chaudhary, 2012).

Although the above example of unsafe travel behavior is hardly unique to India, it is one of many that attest to the challenges Indian cities face in successfully implementing a safe, efficient BRT. Taking these obstacles into account, how can cities aim to implement an operational BRT that is successful in attracting ridership, improving travel time and decreasing accidents? Many studies stress the importance of dictating behavior through design (Bocarejo et al., 2012; Mascarenhas & Chaudhary, 2012; Duduta et al., 2012). Others attest to the importance of improved driver training, licensing and traffic enforcement (Verma et al., 2011). Both approaches are vital for not only the successful operation of BRT but also for the safety of road users on all types of Indian road networks.

#### **2.4 Difficulties in Defining and Involving the Public**

Being that the functionality of BRT requires the cooperation of all road users who interact with the system, its success – in terms of both transit ridership and public acceptance – depends on its perceived legitimacy among citizens. In their evaluation of the public interest, Campbell and Marshall (2002) assert that “in the final analysis people will judge whether a policy is right or wrong, good or bad and their judgment will be based upon their assessment of the substantive consequences of the policy as it affects themselves and others” (p. 123). Thus, in implementing a large-scale infrastructure project that requires substantial resource allocation, governments have good reason to first determine – then demonstrate – that it is in the best

interest of the public. However, in interpreting the public interest, governments are tasked with addressing questions to which there is no easy answer. How do policy makers define the public if it is comprised of very distinct groups? How do they determine what is best for these groups that may have very different needs? How do they choose among policies that have varying levels of benefits and impacts among different groups? Should they place emphasis on short-term or long-term gains, and how will this priority impact the various groups over time?

Defining and interpreting the public interest can prove quite problematic (Campbell & Marshall, 2002; Fainstein, 2000). Campbell and Marshall (2002) chronicle the conceptualization of the public interest from its origins in political theory to its modern day critiques among planning theorists. The mid-1900s saw the rise of expert-driven solutions to serve an uncontested, unified public interest. In the 1960s, this unified public interest and reliance on expertise faced increasing resistance as more and more planners began to doubt its capacity to account for “difference and heterogeneity,” making it “a potentially oppressive idea” (p. 119).

Later, planning circles bore witness to a rise in communicative planning, which relies on process over outcome and acknowledges diversity and conflicting interests. While Campbell and Marshall (2002) understand the limitations of utilitarian ideals in defining a public interest – and though they appreciate the importance of public involvement in forming solutions – they are also critical of communicative planning as a tool for reaching consensus-based outcomes.

Likewise, Fainstein (2000) examines normative-based approaches within modern-day planning, highlighting the conflict between idealized processes and desirable outcomes. She, too, is critical of communicative planning for various reasons, including: “the gap between rhetoric and action,” “lengthy time required for such participatory processes,” and the “potential conflict

between the aims of communicative planning and the outcomes of participatory planning processes” (p. 460). This third critique is fundamental to her argument that democratic processes do not always lead to equitable results.

For both Fainstein and Campbell and Marshall, the difficulty in defining public interest and reaching consensus does not preclude the government’s obligation to assign value and priority among potential outcomes. Solely relying on public deliberation can result in stagnation and a loss of opportunities. At worst, community participation can result in majorities infringing on minority rights. Thus, all three authors advocate for a normative approach to planning that is both process and outcome focused. As Fainstein asserts, “The state can do both good and bad, and likewise, so can the citizenry” (2000, p. 470).

Although they give compelling arguments as to why the public interest should continue to inform planning policy, the authors above give little guidance for establishing the values that inform how we judge the outcomes of said policy, aside from the fact that they should be contextually and historically sensitive. Furthermore, while Campbell and Marshall argue “that choices cannot be left endlessly open” and that “[c]losure must occur when one design or alternative is materialized as opposed to others” (2002, p. 127), their assessment does little to guide the public participation process that projects such as BRT require, especially in cases where they remain contested after project completion.

If a large-scale infrastructure project is to be successful among community members, it will ultimately require community acceptance. Moreover, if the benefits of said project will not come to fruition for a number of years, extensive community participation is necessary throughout the planning phases to foster both buy-in for the project and patience during

construction and trial runs. As Ascher (2010) asserts, “Impatience leads people to discount (i.e., give less value to) consequences occurring further into the future” (p. 147). Thus, if an Indian city is committed to the long-term success of a BRT – which has proven to be susceptible to the actions of individual road users, its government must take measures to ensure that its citizens: 1) understand the potential costs and benefits from the system over time; 2) learn how and why to safely interact with the system; 3) deliberate and decide that they truly want BRT in their city.

This third requisite – the facilitation of true citizen participation – is very difficult to accomplish and is even trickier to conduct in an equitable manner. As Arnstein (1969) defines it, citizen participation is equivalent to citizen power for the “have-nots,” and the prospect of citizen control engenders fear and opposition from those who hold power. Being that BRT physically allocates a section of the road to transit users, who may represent a smaller share of commuters than motorists, it is not surprising when members of the public view it as an unfair allocation of resources. Again, its reception is largely dependent on interpretations of the public interest. As mentioned earlier, how we define the public interest is not only based on who benefits, but also when these gains materialize. While BRT experts know that a successful system has the capacity to attract car users and reduce congestion in the long run, private motorists may not see themselves as potential beneficiaries to the system and thus oppose it. As Fischer (2000) notes, “No demonstration of efficiency [...] can convince citizens to accept [...] that which they do not believe to be good or fair” (p. 42).

Another barrier to full, citizen participation is the increasing specialization and compartmentalization of expertise and the widening separation between experts and the general public (Fischer, 2000). In consideration of the numerous technical and operational nuances that BRT encompasses, it is not surprising that some BRT experts recommend strong, political

leadership as the main criterion necessary for a successful system (Hossain, 2006; Ponnaluri, 2010). However, while a complete top-down approach may ensure that all components of the project remain under expert control, it may not facilitate civic ownership of the project. Given Indian BRT's vulnerability to unsafe travel behavior of individual road users, it is vital that all passengers, pedestrians, cyclists and motorists take ownership of the system for it to function properly.

While transportation experts may fear that allowing citizen deliberation over design and operational elements may compromise the functionality or safety of a transit system, Fischer (2000) asserts that here, the expert's "task of analyst-as-facilitator is to assist citizens in efforts to examine their own interests and make their own decisions" (p. 251). Discounting the public's ability to arrive at similar conclusions when presented with the whole story is a missed opportunity to foster ownership of and legitimacy for the project. Furthermore, being that citizens are the ones who have the most intimate understanding of their neighborhoods and personal travel behavior, they will be able to contribute invaluable local knowledge to help planners better serve their needs (Fischer, 2000; Institute for Transportation Development Policy, 2007).

While Fischer provides useful guidelines for an inclusive planning process that fosters project legitimacy and incorporates expert and local knowledge, unforeseen outcomes that disproportionately harm relatively powerless groups lend credence to Fainstein's (2000) argument: "Democratic pluralism, with its emphasis on group process and compromise, offers little likelihood of escape from dominance by those groups with greatest access to organizational and financial resources" (p. 469). If the outcome of events is solely based on the legality of

process, those with higher education and higher incomes will have much greater success in mobilizing for causes that will benefit themselves the most.

## **2.5 Conclusion**

As detailed in this literature review, BRT has the demonstrated capacity to improve safety and efficiency on urban corridors within different national contexts. The problematic nature of India's transportation system attests to both the benefits it stands to gain from a successful BRT along with the threats it may pose to proper implementation. Given that public attitudes toward BRT can have substantial effects on its functionality, as has been the case in Indore, this review explored the difficulty in defining the public interest, the barriers to fostering equitable participation and the capacity of participation to contribute to public ownership and legitimacy of a project.

### **3. Methods**

This case study seeks to understand the competing narratives surrounding Indore's BRT during and after project implementation. Through qualitative content analysis, I reviewed news articles, agency documents, formal studies and courtroom proceedings to address the following research questions: How did the media frame the developments of the project and the attitudes of various stakeholders? Among the actors who deliberated over the future of the system, what were the foundations of their arguments for or against the BRT? Why did the High Court ultimately rule to allow cars into the BRT lane?

Being that it addresses a present-day phenomenon with ongoing developments and interrelated actors, this paper employs the case study approach to analyze the various circumstances that may have contributed to the outcome of events. According to Yin (1994), “[t]he case study is preferred in examining contemporary events, but when the relevant behaviors cannot be manipulated,” and moreover, its “unique strength is its ability to deal with a full variety of evidence” (p. 8). Originally, the aim of this study was to collect evidence to measure the effects of the BRT on road safety and mobility indicators. However, considering that the High Court ruling limited the ability of the system to operate as a full-functioning BRT, the focus of this study shifted to the circumstances surrounding the contentious implementation process that culminated in the ruling.

According to Johnson (2002), “[t]o recognize more than one discourse emphasizes that what is being discussed and acted on is never unanimous but often challenged and negated by opposing groups” (p. 67). During my time working on the launch of Indore's BRT, it became evident that attitudes toward the project ranged from fierce opposition to ardent support among various stakeholder groups. These competing discourses surfaced as media accounts that played



a part in both framing the issues as well as bringing them to the forefront of the public's awareness. Ultimately, the High Court deliberated over these ongoing arguments in coming to its decision. In an effort to better understand the dynamics of these narratives, I sought to collect evidence that presented arguments for and against Indore's BRT.

Through correspondence with transit agency representatives I was able to collect summaries of court proceedings, official statements, agency documents, and decisions and opinions from the judges. I then examined the manner in which each party – including the judges – framed the issues to present their arguments. In describing the methodology for discourse analysis, Johnson asserts that “textual materials are analyzed in a two-step process, first, to refine theoretical categories and generate new ones, [...] and second, to apply newly refined codes to the broad body of text” (p. 69). In examining records and agency reports from the courtroom proceedings, I coded for contested concepts that represented fundamental differences in the argument of each side. I defined “contested” as incurring disagreement over facts or principles. In selecting these concepts, I also relied heavily on the language from the final court ruling, being that the judges directly addressed many of these disagreements in coming to their decision. I then re-analyzed the texts through these concepts to determine how competing actors formed the rationale for their arguments.

In analyzing media narrative, it is necessary to acknowledge the media's role in reporting events and opinions as well as influencing them. As an arena, news publications serve as an outlet to report on current events, popular sentiment and opinion editorials. However, its discretionary nature in choosing *what* to report, *how* to describe it, and *who* represents the general public attests to its role as an actor in framing disputes as well. According to Herman and Chomsky (2002), “The raw material of news must pass through successive filters, leaving only

the cleansed residue fit to print. They fix the premises of discourse and interpretation, and the definition of what is newsworthy in the first place” (p. 2). While I cannot definitively prove that news articles played a role in influencing actors who affected the implementation process, analyzing the nature and evolution of their discourse can help us better understand how they may have influenced opinions and actions during the course of events. Further, such analysis can lend insight into the views of key stakeholders whose actions and opinions led to the outcome of the High Court ruling.

For the media analysis, I based my methodology off of Herman and Chomsky’s (2002) *Manufacturing Consent*, in which the authors systematically analyze and document the use of specific language within news articles that cover a given topic. While they relate the implications of their findings to the legitimization of domestic and foreign policies, my comparatively smaller data set prevents the scope of this study from incorporating findings that relate to a broader, media agenda. However, analyzing news articles in this manner does allow for a methodical examination of the manner and frequency in which specific issues and opinions were framed for the public.

In collecting media narratives, I compiled printed news articles from various publications during my time in Indore from May until August of 2013. From August until February 2014, I relied on internet searches to continue collecting news coverage on the BRT. I found articles by periodically searching the internet with the terms “Indore BRT” and “Indore iBus.” Due to language limitations, my search was restricted to articles in English. This study did not account for media coverage from television or radio.

After eliminating neutral accounts from my article data set, I searched the text and the titles for both positive and negative portrayals of the BRT. Separating the data by news source, I counted each time an article presented: titles with a positive tone; titles with a negative tone; officials, agency representatives, experts or activists praising the BRT; officials, agency representatives, experts or activists criticizing the BRT; members of the public praising the BRT; members of the public criticizing the BRT; officials, agency representatives, experts or activists claiming that BRT is benefiting/will benefit the public; officials, agency representatives, experts or activists claiming that BRT is harming/will harm the public; portrayals of public hardship due to the opening of the BRT lane; accidents in the BRT lane; project or operational complications; claims of narrow vehicle lanes or lost road space.

Finally, I was a participant and observer during the launch of i-Bus, from May to August in 2013. During this time I worked as an Intern for EMBARQ India, an organization that served a consultant-advisory role for the transit agency, the bus operators and the city officials. My primary responsibilities were collecting and analyzing performance data during the trial runs and conducting a comprehensive safety inspection of the bicycle and pedestrian infrastructure that was constructed alongside the BRT. Working under this role lent me the experience of seeing how plans materialized on the ground level. During my internship, conversations with city administrators, agency representatives, and members of the public gave me an initial exposure to various perspectives and attitudes concerning the BRT. While I sought to make this study as objective as possible, I was working on behalf of an agency with the primary objective of implementing a successful BRT.

#### 4. Background/Area of Study

The city of Indore is the financial capital of the state of Madhya Pradesh in central India. The current population is over 1.96 million, with a greater urban population of approximately 2.17 million (Office of the Registrar General & Census Commissioner, India, 2011). Like many Indian urban centers, the District of Indore has experienced rapid population growth, with an increase of 33% from 2001 to 2011 and an increase of 34% from 1991 to



Figure 1: Indore (Reproduced from galaxyeducations.com)

2001. With the local government largely struggling to provide adequate infrastructure and municipal services to its citizens, Indore has experienced many of the negative externalities associated with rapid urbanization: air and water pollution, makeshift housing settlements, and as it pertains to this study, a multitude of transportation problems (Pucher, 2005).

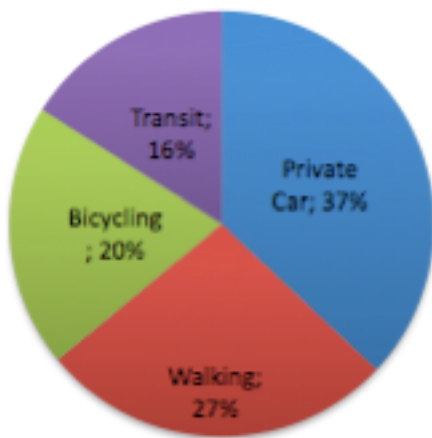


Figure 2: Indore Travel Mode Share, 2010 (Data from Bhat, 2011)

In part due to a rapidly growing population and a rising motorization rate, Indore's roadway network is rife with congestion, delay and accidents. Currently, the motorized vehicle growth rate is 8.8 percent annually (Bhat, 2011). A 2010 study found that the largest commuter mode share in Indore is the personal motor vehicle (PMV) at 37 percent, with a majority of these being scooters and motorcycles. Following is

walking at 27 percent, bicycling at 20 percent and public transport at 16 percent (Ray & Bomberg, 2010). While non-motorized transport (NMT) represents nearly half of the mode share in the city, pedestrians and cyclists in India are the most vulnerable to accidents (Pucher, 2005). Part of the problem involves a lack of adherence to road rules and a lack of traffic enforcement (Verma, 2011). There are also institutional barriers to road safety, such as the government's unwillingness or inability to provide adequate infrastructure for NMT. In Indore, ninety percent of the roadways lack a sidewalk (Bhat, 2011). Cycling infrastructure is practically non-existent. Moreover, what NMT provisions *do* exist are often overrun with obstructions – motorized vehicles parking (and driving), commercial obstructions, debris, open manhole covers – so much so that pedestrians and cyclists have no choice but to enter the roadway (Advani & Nisha, 2013).

In an attempt to mitigate urban transportation problems – e.g., accidents, congestion, and pollution – the national government of India spearheaded the Jawaharlal Nehru National Urban Renewal Mission (JnNURM), which has allocated more than \$20 billion to projects that aim to improve the quality of urban life. In 2006, the city of Indore successfully attained funds through the program to build its first bus rapid transit (BRT) line. The detailed project report (DPR) originally called for 23.8 km pilot corridor on Agra-Bombay Highway (i.e., A.B. Road), a major arterial and one of the most congested corridors in the city (Indore City Transport Services LTD, 2006). The report indicated that this would be part of an 89 km system with the purpose of “covering the entire area and population of the city with an effective road network by 2011 (p. 2). As can be seen in the table below, the project objectives aimed to improve accessibility, mobility, congestion, and reduce automobile dependence.

**Table 1: BRT Project Objectives (Reproduced from Indore City Transport Services LTD, 2006, p. 2)**

- To increase the accessibility in the city
- To increase the speed of transportation
- To reduce the cost of public transportation and make it accessible to people of all the economic classes
- To reduce the traffic congestion
- To popularize public transport and reduce the dependability over private vehicles
- To improve the traffic management in the city

The pilot corridor was to incorporate the following features: dedicated center lane with raised barricades, prepayment, covered stations, level boarding, automatic doors, dedicated pedestrian and bicycle lanes, and a fleet of fifty air-conditioned buses. These physical and operational characteristics were designed to allow buses to rapidly transport heavy passenger loads with minimal stoppage time and largely unencumbered by vehicular traffic. On paper, the system had the potential to dramatically improve services for transit riders, increase safety and accessibility for NMT users, and even improve congestion for motorists (provided that the BRT was able to attract choice riders away from PMVs). Unfortunately, everything did not go according to plan.

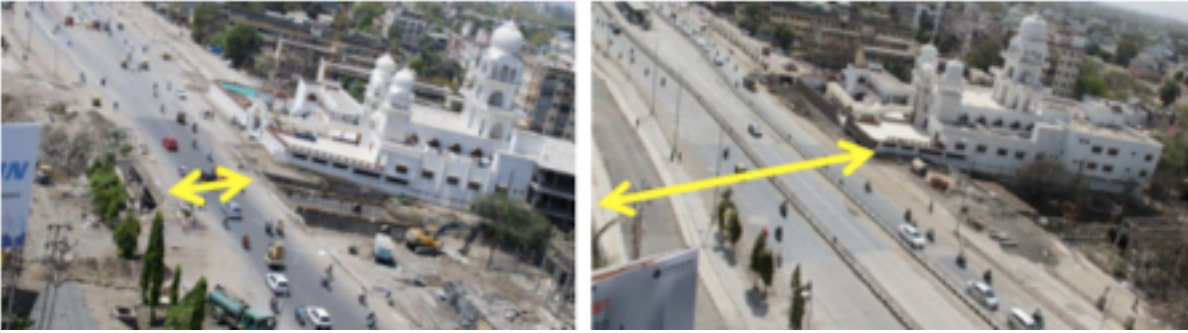
Due to budget and time constraints, the originally proposed 23.8 kilometers was reduced to an 11.4 km route. Construction began in August of 2007 but was not completed until March of 2013. Delay was inordinately long in part due to uncoordinated, parallel sewerage and water projects along the corridor. In order to accommodate for the future dedicated busway, and so as not to remove space from the existing motor vehicle lanes, the project involved substantial road widening. Being that it took over a year to install the bus lane barriers following the completion

of road widening, motorists likely grew accustomed to driving on the extra road space. Thus, once the bus lanes were finally installed, many motorists perceived this as the project taking their road space.

**Table 2: Project Timeline**

August, 2006	<ul style="list-style-type: none"> <li>• Indore attains funds through Jawaharlal Nehru National Urban Renewal Mission (JnNURM) to build pilot BRT</li> </ul>
August, 2007	<ul style="list-style-type: none"> <li>• Construction begins</li> </ul>
January, 2013	<ul style="list-style-type: none"> <li>• Civic activists file first petition against BRT, alleging various difficulties public would face due to project</li> </ul>
March, 2013	<ul style="list-style-type: none"> <li>• Construction of 11.4 km corridor completed on A.B. Road</li> </ul>
April, 2013	<ul style="list-style-type: none"> <li>• Commissioner submits report addressing public concerns and demonstrating benefits of BRT</li> <li>• High court approves commencement of test runs</li> <li>• iBus test runs begin April 19th</li> </ul>
May, 2013	<ul style="list-style-type: none"> <li>• Beginning of passenger trial runs</li> </ul>
June, 2013	<ul style="list-style-type: none"> <li>• Arrival of new judge to High Court bench allows for filing of second petition against the project</li> <li>• Court orders creation of expert committee to investigate feasibility and long term viability of BRT</li> </ul>
October, 2013	<ul style="list-style-type: none"> <li>• High Court rules to allow private cars into dedicated BRT lane</li> <li>• Rise in accidents and travel delay, decrease in ridership</li> </ul>
December, 2013	<ul style="list-style-type: none"> <li>• BRT expert committee delivers report arguing for removal of cars from BRT lane</li> </ul>

The plan also called for the rerouting of redundant transit lines along A.B. Road. While this posed no problem for city-operated buses, private mini-bus operators – which carry a large share of transit passengers – were clearly opposed to the move. This, combined with a perception of lost road space, coupled with a construction process rife with delay, resulted in a large sector of the public impatient with – and even resentful towards – the project before operations began.



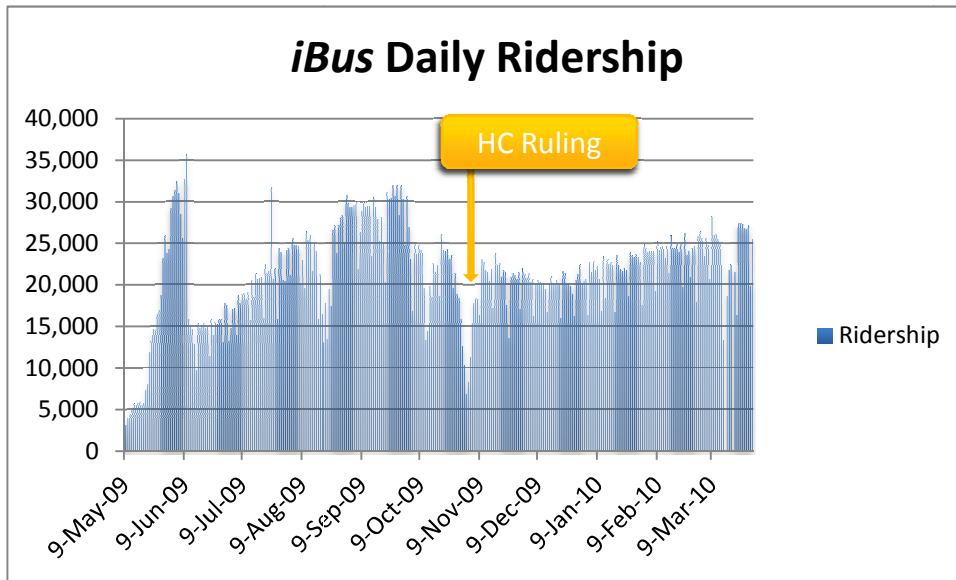
**Figure 3: A.B. Rd. Pre, Post Construction (Reproduced from: Office of Divisional Commissioner, Indore, 2006)**

Largely absent during implementation was a public participation process. Although the transit agency began to spearhead certain outreach measures – e.g., invited passenger focus groups for students and professionals, passenger surveys, video advertisements, and a Facebook page – these were more educational and informative than they were interactive decision-making. Moreover, most outreach efforts did not begin until shortly before services were set to launch. Large parts of the implementation period also saw a lack of positive engagement with the press from agency and government representatives. There were also cases of city officials and local politicians speaking out against the BRT, causing quite the stir in local papers. Though a last-ditch effort by transit administrators to engage the press – via a study tour of a successful Indian BRT – resulted in a better understanding of the project and its aims, it is unclear how effective it was in counteracting the largely negative stories from the local press.

Passenger-less trial runs began in April of 2013, with a one-month, fare-free passenger trial run beginning in May. While the free trial runs saw daily ridership climb from 7,800 to nearly 35,000 after one month, commercial operations did not reach this level of ridership until four months after they began in June. The main issue during this time was the under-supply of buses. Although the project was funded to allow for a fleet of 50, by the time operations began, the manufacturer had only supplied 12. Buses were constantly overcrowded, and the system



experienced delay due to excessive loading and unloading times at each station. With the addition of each new bus, the system saw improved headway times and an increase in daily ridership of approximately 2,000 passengers. However, progress was so slow that the system had acquired only eighteen buses after four months of commercial operations.



**Figure 4: BRT Daily Ridership (Data from Indore City Transport Services, LTD, 2014)**

Ultimately, the BRT, as it was planned, did not have the opportunity to prove that it could improve safety and congestion. In January 2013, a social activist known to fight for issues such as improved solid waste treatment and ring road construction brought suit against the BRT, alleging problems that the general public would face due to the project. Various local, state and national officials defended the case; these included the Chief Secretary of State of Madhya Pradesh, the secretary of JnNURM, the transit agency CEO, the Indore Development Authority CEO, the Commissioner of Municipal Corporation of Indore, and the Indore Collector. On October 1<sup>st</sup>, the High Court of Madhya Pradesh ruled that motorized four-wheelers could travel in the dedicated busway. Following the ruling, there have been approximately 30 accidents in the BRT lane (as of February, 2014), up from two during the first five months of operations. Daily



Figure 5: City of Indore with proposed 89 km BRT route (Indore City Transport Services, LTD, 2006)

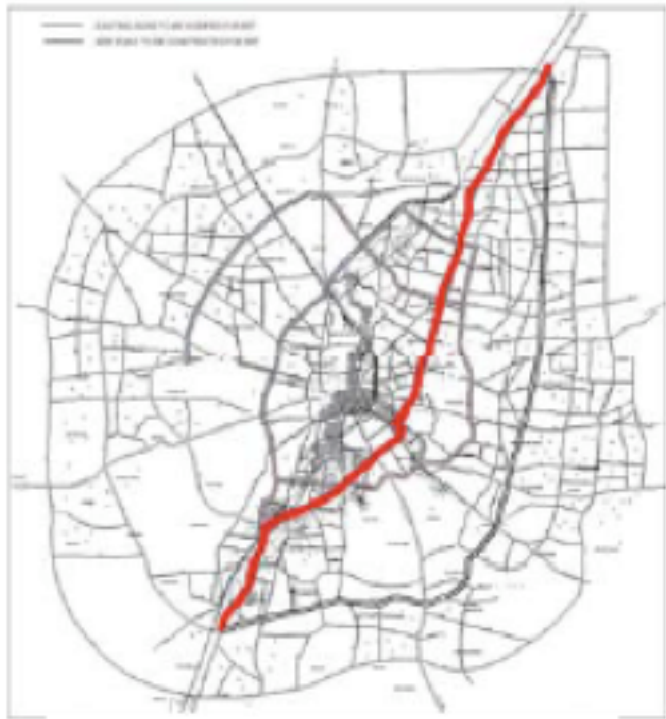


Figure 6: Proposed 23.8 km route on A.B. Road (Indore City Transport Services, LTD, 2006)

ridership dropped from approximately 30,000 to 17,000 within days of the order, and average corridor travel time increased from 37 to 60 minutes during peak hours (A. Roy, personal communication, February 21, 2014).



Figure 7: A.B. Road 11.4 km route (Indore City Transport Services, LTD, 2013)

## **5. Findings**

### **5.1 Introduction**

I first provide a summary of my findings. I then provide an overview of the court proceedings, highlighting the main arguments from groups who supported or opposed the BRT. Throughout the section, I incorporate related news articles that frame the project developments, both on the ground and in the courtroom. Next I examine the manner and frequency in which various news sources framed events and attitudes relating to the BRT. The final section is a discussion of the findings.

### **5.2 Summary of Findings**

This study considers the competing narratives surrounding Indore's BRT during and after project implementation. Courtroom proceedings, agency documents, and news articles present the implementation process as prone to project complications and highly contentious among various actors whose decisions had direct effects on the operation of the BRT. In analyzing data relating to the High Court ruling, I found fundamental differences in the understanding of contested themes that formed the basis for each side's argument. Media narratives shed light onto the various problematic developments during implementation and operations. They also portrayed competing perceptions of the BRT among various actors, including the collectively defined "public" and the retiring judge who publicly voiced his disdain for all BRTs.

Among the reviewed news articles, 13 out of 32 chronicled the project and operational complications that occurred during and after implementation. While some address external factors that have hindered construction or operations, the focus or title of the article often implicated the BRT itself as the cause of problems on the corridor. Although the majority of the articles had titles with neutral tones, there were over twice as many negative titles than there were positive

ones. A small portion of news stories presented positive portrayals of the project, but these most often reflected the views of political or agency stakeholders advocating for the BRT and pointing to its future benefits. More often, the articles described impatience or frustration with the BRT on the part of political figures, the High Court, civic activists, and members of the public.

Within the court proceedings and related agency documents, I found three themes that represented fundamental differences in the foundations of opposing arguments: 1) the conceptualization of the greater good, 2) the depiction of traffic problems and their sources, and 3) the prioritization of public participation. I found that both sides appear to uphold the public interest as their main motivation. However, the fundamental difference lies in the manner in which each party defines the greater good. Those arguing against the BRT perceived its share of dedicated road space as unjustified due to its comparatively lower passenger throughput. For them, dismantling the BRT would provide immediate benefits to the most road users through congestion mitigation. Those advocating for the BRT were more focused on the future benefits of the system for all road users. In their opinion, if the BRT were given enough time to acquire the adequate number of buses to attract sufficient ridership, even more road users could potentially benefit via reduced congestion, pollution, and accidents.

The second contested notion was the cause of traffic problems. In presenting and depicting traffic problems on the corridor, those arguing against the BRT place blame on the dedicated busway as the main culprit. On the other hand, those arguing for the BRT claim these problems were ongoing and often frame them as an opportunity for improvement through BRT operations. One of the main points of contention here was the width of the road for private motor vehicles (PMV) prior to and following construction of the project. While photo evidence reveals that road space for PMVs was maintained or widened along the corridor (Office of the Divisional

Commissioner, Indore, 2013, p. 9), the petitioners argued on multiple occasions that the PMV lanes were narrower. Though there was no comprehensive study to demonstrate that the BRT contributed to traffic problems, over time the High Court itself began to adopt language based on this claim.

The third contested notion was the concept of public participation. Although it received comparatively less treatment than the previous two, I found discrepancies between the two sides' interpretation of what constitutes adequate participation. Related court documents reveal acknowledgement from both sides that public participation was largely left out of the planning process. Further, most references to it emphasize informing the public more so than involving them. For example, those that argued against the BRT did not criticize the planning process for a lack of involvement. However, they did attempt to get the project suspended for not issuing a proper notification. Those who advocated for the BRT acknowledged that many problems during implementation and operations were due to a lack of buy-in or public participation. However, their suggestions to remedy this problem were more educational and persuasive than participatory.

While it is impossible to prove the true motivating factors behind the actions and decisions of key actors, this study also sought to understand why the High Court ruled to allow cars into the BRT lane. A review of the language from the rulings and opinions suggests that the judges' understanding of the contested notions aligned most with that of the social and environmental activist who filed suit against the BRT, namely: that the BRT was the primary cause of traffic problems on the corridor, that the low percentage of transit riders did not warrant a dedicated busway, and that the greatest amount of public utility would result from opening the BRT lane to private cars. Similarly to the prosecutors, the judges never made mention of the bus

riders or the benefits they stood to lose or gain from the outcome of the ruling. Finally, while the BRT supporters argued in favor of the potential gains the system offered to all road users, the retiring justice's public remarks – that BRT is a failed concept – suggests he never believed BRT could be successful in Indore.

### **5.3 Court Proceedings and Media Narrative**

#### **5.3.1 First Petition Filed Against the BRT**

In January of 2013, nearly five and half years after construction of the corridor began and months before operations launched, several petitioners filed suit against the project. Leading the charge was Kishore Kodwani, a local activist who gained local recognition for petitioning and performing hunger strikes on behalf of various civic issues, including: improved drinking water, solid waste treatment, the establishment of a traffic engineering cell, and the construction of ring roads. While it is relatively costly to finance petitions and trial attorneys, this study was unable to determine how this particular lawsuit was funded throughout the year. In their attempt to get the project suspended, they alleged “various difficulties which are likely to be faced by the public at large on account of the dedicated bus system” (Kodwani v. State of M.P., 2013). The main difficulties that the petitioners predicted were traffic jams and accidents. In response, the High Court requested that the petitioners return with documented evidence of their claims and that the city's Divisional Commissioner invite and consider “suggestions in regard to the proper implementation and use of the road constructed under BRTS project from the social organizations and the persons interested.” The petitioners' allegations effectively placed the burden on the city to justify the potential utility of this service to the public.

Due to recurring delay during the construction process, media articles during this time portrayed the impatience of city stakeholders to have the project finished. In “BRTS fails to meet

deadline yet again,” the *Times of India* reported on recurring construction delays that have prolonged project implementation, and that “the authority is in no mood to extend the deadline” (TNN, 2011, para. 2). While it does mention problems with land acquisition, there is no reference to the parallel sewerage projects that purportedly caused much of the BRT’s construction delay.

### **5.3.2 Response from the Divisional Commissioner of Indore**

In April of 2013, the Office of Divisional Commissioner, Indore issued a report addressing public concerns, per the High Court order, and demonstrated the potential benefits that BRT has to offer citizens (Office of the Divisional Commissioner, Indore, 2013). While the commissioner affirms to have taken the public’s views into consideration – via written suggestions and a public hearing conducted during the previous month – the primary focus of the report is to demonstrate the advantages of investing in BRT over the traditional paradigm of widening roads. Though the report does take into account certain areas of concern and challenges – such as a lack of coordination between agencies, enforcement of BRT lanes, and attracting commuters – it frames these as opportunities for improvement. Arguably, the entire report is an ardent response to those who object to BRT. It attests to “the strength of public transport as an enabler of equality among genders” (p. 7), the potential for reduced tail-pipe emissions, the congestion-mitigating benefits of segregated lanes, and the safety track record of Indore’s current transit operations. However, being that the BRT had yet to begin operations, the report relied on evidence from other cities that have born witness to the benefits of sustainable transit.

The Commissioner’s report also contends that the administration did not make “adequate efforts in communicating the features, benefits and changes to the citizens,” it is not surprising that the process resulted in “misinformation and confusion” and “public outcry against the

project” (Office of the Divisional Commissioner, Indore, 2013, p. 10). The report attributed the main sources of discontent to excessive project delay and motorists growing accustomed to “the extra-wide road available to them in the intervening period between the expansion of the road and the construction of the railings for the bus corridor” (p. 9).

This last point is integral to the arguments both for and against Indore’s BRT as they relate to the public good. While photo evidence from the report supports the argument that BRT construction maintained – and often increased – road width available to motor vehicles along the corridor, the petitioners’ allegations largely centered on claims that the BRT had made traffic worse. News articles during this time also reveal members of the public expressing this view. In the *National Herald*, a commuter reports that, due to the BRT, traffic has worsened in certain areas “where the width of mixed lane is comparatively less” (NH Correspondent, 2013).

Despite these views, the commissioner’s report concludes on a hopeful note, contending that although projects such as these that attempt a “paradigm shift in the attitude, knowledge and usage of the public facility has to battle odds against it, [...] this project should be given a chance to prove its worth” (pp. 21-22). The commissioner’s language is echoed in news articles that portray BRT proponents espousing the future benefits of the system for all road users. During a team inspection from the Jawaharlal Nehru National Urban Renewal Mission (JnNURM), a government representative stated that with the success of the system, the “number of vehicles in motor vehicle lane is expected to go down as commuters will shift to public transport system [...] and it will ultimately reduce vehicle pressure on road” (TNN, 2013, p. 3). From another article reporting on the same visit, the representative predicted that “when the BRT corridor is in full operation, 50 to 60 percent of the public will use it and under such condition, the space occupied by the BRT corridor is not unjustified” (HT Correspondent, 2013, p. 3). Ultimately, the



High Court agreed that “it would be unjustified to stop the trial run on the basis of apprehension of the petitioners” (Kodwani v. State of M.P., 2013) and approved the launch of trial runs with continual monitoring and reporting.

### **5.3.3 Second Petition Filed Against the BRT**

Passenger-less trial runs began on April 19<sup>th</sup>, 2013. On May 10<sup>th</sup>, riders were allowed to use the system, free of charge, until the beginning of commercial operations on June 12<sup>th</sup>.

However, with the arrival of a new High Court bench, a new petition was filed against the project on June 17<sup>th</sup>. During the proceedings on July 16<sup>th</sup>, the petitioner alleged “that the movement of traffic in the bus lane, which is comparatively wider, is about 3% only, much less than the narrower lanes for the ordinary private vehicle” (Kodwani v. State of M.P., 2013). A cursory glance at any section of the corridor reveals that the BRT lane is not comparatively wider than the space allotted for private motor vehicles. Further, although the transit agency later used ticketing data to argue that the system was carrying 8.8% of the corridor’s passengers, the fact remains that at that point in time, the dedicated BRT lane was transporting a disproportionately smaller share of travelers relative to the PMV lanes.

Articles from this time would often describe BRT problems associated with institutional and cultural factors, such as poor infrastructure provision and unlawful motorists. For example, the *Times of India* article “BRTS not friendly, safe for disabled” highlights both the accessibility limitations of the system and the problems all NMT users face on the new cycle and pedestrian paths. While poor accessibility and infrastructure provision are typical across the city, urban transport expert Rajendra Ravi asserted that BRT is meant to be “an integrated system of public transport where pedestrians, cyclists and handicapped people get equal importance” (TNN, 2013). Furthermore, whether the sidewalk and bike path obstructions were due to shoddy

construction or unregulated vehicle and commercial encroachment, the fact remains that the BRT had done little to improve accessibility for wheelchair-bound users.

Not all media narratives presented negative sides of the story, however. Prior to the High Court ruling, there were two articles that largely focused on transit riders' approval of the system: *Hindustan Times*' "Students give a thumbs up to i-bus" (Bhonsale, D. R., 2013) and the *National Herald*'s "Paid trial run of i-buses: Passengers give thumbs up." In the second article, a passenger says, "We do not mind to pay fares for travelling on i-buses, given the kind of comfort we are getting [...] adding that with AC and other facilities, traveling on i-buses is not only comfortable but also time-saving" (NH Correspondent, 2013). Other articles reporting positive developments for the BRT still had negative undertones. For example, after the beginning of passenger trials, the *National Herald* reported, "Contrary to expectation, commercial trial run of i-buses on the BRTS corridor in the city received enthusiastic response today" (2013). Thus, although there was evidence of the BRT improving mobility for transit users, the tone or context of articles draws the reader's attention to the problematic implementation process.

Although news articles brought attention to various project complications and operational shortcomings, the fundamental arguments for and against the project ultimately boiled down to ridership: Did the current low-level use of the BRT among the public at large merit dismantling the system, or did its demonstrated benefits and potential to attract more ridership warrant the continuation and expansion of services? In their ruling, the judges ordered the formation of a five-member, expert committee to: assess the "deficiencies as well as the day-to-day problems faced by the general public due to BRTS," submit a report "disclosing if the project is presently feasible as well as viable," and "give suggestions for free flow of traffic by taking care of bottlenecks and for improving the workability of the project" (Kodwani v. State of M.P., 2013).

In describing the court case against the BRT, an article from *The Times of India* adopts much of the language from the court proceedings, reporting the allegations brought forth by the civic activist as fact: “Indore bench of Madhya Pradesh high court on Tuesday constituted a five-member committee of experts that will examine the [...] project including its *shortcomings that are creating problems for the people* [emphasis added],” (Jha, 2013). The article goes on to report the unfounded claim that the BRT lane is “comparatively wider” than the “narrower lanes for the ordinary private vehicles.”

This widespread perception fueled rising resentment and opposition among various public actors, also reflected in the media narratives. For example, one article reported state officials speaking “on negative terms about the corridor and the problems it had created for the people” (HT Correspondent, 2013, p. 3). A piece from the *Hindustan Times* reported that para-transit workers were set to go on strike in protest of being prevented from using the dedicated busway (HT Correspondent, 2013). In the *Times of India*, social and environmental activist Kishor Kodwani warned that over 200,000 people “are going to suffer for 30,000 passengers. Large number of passengers may again switch over to personal vehicles in future, thus adding to the pollution” (TNN, 2013). Based on the media narrative, it would seem that public pressure was mounting, with the future of the system hinged on the High Court’s interpretation of the public interest.

#### **5.3.4 High Court Rules to Open the BRT Lane**

In the subsequent hearing on October 1<sup>st</sup>, 2013, the High Court ruled “in the interest of the public at large and also keeping in view the wastage of public time, fuel which is being imported and prevention of pollution [...] the respondents are directed to permit traffic of four wheeler (only) on the BRTS route” (Kodwani v. State of M.P., 2013). In coming to its decision,

the court took into consideration a number of key allegations: that 41% of the road (the BRT lane) is now dedicated for 2.51% of motorized traffic; that because of the BRT, “traffic is blocked and general public as well as local residents of Indore are suffering immensely” (p. 5); and considering the “urgency in the matter, this Court can not wait in the taking the decision for an indefinite period as the scheme of BRTS has been framed to provide smooth traffic movement in the Town” (p. 5).

In essence, although the defendants were able to demonstrate that the system was slowly gaining ridership, and although there was no comprehensive study to back the petitioners’ claim that the BRT had worsened traffic, the judges ruled that the “general public” could no longer afford to wait for the system to realize its projected operational levels. Again, there are two lines of rationale that justify each side of the issue. From the petitioners’ standpoint, the current mode share on the corridor did not warrant the prioritization of a bus-only lane. The BRT committee, on the other hand, viewed the long-term goals from the project (congestion, pollution, and road hazard mitigation) as justification for allowing the system enough time to achieve higher levels of service. At the conclusion of the hearing, the court ordered for the BRT expert committee to submit a report detailing the impacts of opening the dedicated busway.

### **5.3.5 BRT Lane Opens to Cars**

Following the High Court ruling, there were approximately 30 accidents in the BRT lane (as of February 20, 2014), up from two during the first five months of operations. Within days of opening the busway, daily ridership dropped from approximately 30,000 to 17,000, and average corridor travel time increased from 37 to 60 minutes during peak hours. As one student rider told *DNA India*, “After the HC allowed plying of cars in the dedicated lane, traffic jams [...] are witnessed daily” (DNA Correspondent, 2013, para. 7). As can be expected, media accounts

during this time were characterized by dramatic reports of severe crashes on the corridor. While the large jump in accidents before and after the ruling would lead the reader to place blame on the court decision, newspaper titles such as “Indore BRTS under fire after car mows down senior citizen” (TNN, 2013) and “More blood on BRTS” implicate the BRT itself as the main culprit (TNN, 2013). Though these articles do make mention of the court ruling, the rather sensational titles set the immediate tone. Aside from the reports on increased accidents, there was also reporting on severe drops in daily ridership, reckless driving on the corridor, and traffic jams in the BRT lane.

Also during this time were several instances of political leaders, and even a High Court judge, publicly denouncing Indore’s iBus and BRT in general. In *The Times of India*, a former public official from neighboring capital Bhopal gave recommendations to make more accommodations for mixed traffic on his city’s BRT. He “slammed authorities for refusing ‘to learn even from the failure of the system in Delhi and Indore’” (TNN, 2013, para. 7). In “BRTS blurs party divide, BJP, Congress want it to go,” candidates from opposing parties agreed that the BRT should be dismantled. “Sensing negative sentiments of people with the BRTS and inconvenience faced by people, none of the candidates want to face the wrath of the voter” (TNN, 2013, para. 3). Finally, and most telling, came the article “BRTS a failed concept, says Justice NK Mody.” Three months after delivering the verdict and immediately before retiring, Justice Mody spoke with media representatives, declaring that “BRTS had failed to click anywhere fully, be it Indore, Ahmadabad or Delhi” (TNN, 2013, para. 2).

### **5.3.6 High Court Denies Appeal**

On October 21<sup>st</sup>, the court considered and denied an appeal on behalf of the BRT filed by various agency representatives. A written account from the proceedings alludes to the judges’

frustration with the resistance from the BRT proponents. For one, they admonish the Collector for making “derogatory” statements in reference to the ruling, suggesting “that he has no respect or regard to the order of the court” (Kodwani v. State of M.P., 2013). The judges also make reference to the fact that the respondents delayed implementation of the order for two days and that they rushed to file this appeal instead of working on the previously requested BRT committee report. However, according to the respondents’ testimony, it appears that they felt a sense of urgency following the latest ruling, due to: “utter confusion and disarray in traffic,” daily accidents, damage to railing and traffic signals, and a dramatic increase in bus travel time with a resulting decrease in ridership. However, despite such claims, the petitioners countered that “wrong publication has been made in the news papers that mix lane of B.R.T.S. corridor is not safe.”

Interestingly, although the court denied the appeal, the judges asserted that they want BRT to “function successfully,” being that public transit is necessary for the “development of the city.” However, it could not justify allowing for a dedicated bus lane that was only operating with 16 buses. The judges also reasoned that “for promoting public transport of the said route other infrastructure is also necessary,” pointing out that someone traveling to the court via BRT would need to connect on a second mode of transport “which is completely impracticable.” However, these statements are difficult to reconcile considering that BRT route expansion seemed highly unlikely following the ruling.

### **5.3.7 BRT Expert Committee Delivers Report**

On December 20<sup>th</sup>, 2013, the court-appointed expert committee - composed of various agency, state and federal officials – submitted a report on the feasibility and long-term viability of Indore’s BRT, along with recommendations to improve traffic flow on the corridor and the

overall functioning of the system. Spanning over ninety pages (Saxena, Kulkarni, Tiwari, Pandey & Rastogi, 2013) it emphatically defends the need to promote effective public transit and non-motorized transport for the future of Indore's development. In arguing that citywide traffic and road safety conditions were deteriorating prior to project construction, it suggests that the BRT is not the main party responsible for the traffic woes for the city. Moreover, the report argues that the traffic and safety problems associated with rising motor vehicle ownership will grow steadily if the city continues to prioritize business-as-usual traffic management approaches.

The committee echoed the judges' frustration that the current number of buses operating in the BRT lane is a drastic underutilization, and "the failure of the administration to procure buses in time even after so many successive delays in construction is deplorable" (Saxena et al., 2013, pp. 40-41). However, unlike the judges, they do not see this as justification for opening of the BRT lane to cars, being that the increased activity from private automobiles has resulted in the slowing of bus services and an increase in accidents. Instead, the report advocates for the system to operate on a dedicated lane with the fifty buses for which the plans called for: "If the fleet is increased such that the average headway is one minute, then the congestion on the motor-vehicle lane can reduce drastically. Hence the recommendation is to address this at top priority" (p. 41).

In order to identify issues associated with the functioning of the system, the committee conducted field visits and considered public input per the court-ordered feedback/suggestion process. Highlighting the successes of the project, the committee administered onboard surveys among transit riders to show a largely satisfied clientele and employed ticketing data to show a 293% increase in ridership during the four months prior to the High Court order. They also contested the petitioners' claim that the BRT carried only 3% of traffic, employing ticketing data

to demonstrate that the BRT actually carried 8.8% of passengers. In arguing for the court to reverse its decision, the transit agency “pleaded 52 percent passengers expressed complete satisfaction with the previous system (dedicated corridor for ibus)” with 34 percent suggesting route extension and 10 percent suggesting more buses (TNN, 2013, para. 3).

In identifying problems that have jeopardized the implementation and proper functioning of the system, the committee claimed that a lack of public involvement during the planning process “led to much resentment toward the project” (Saxena et al., 2013, p. 36). They also pointed out that even though the system was now in place, it was facing challenges in the realm of public acceptance due to a lack of publicity explaining the benefits to “the citizens of Indore, bus users as well as other vehicle users” (p. 36). In contrast to the petitioners’ claim that only a small percentage of riders were benefiting from the BRT, it is interesting to note that the committee included more than just bus riders in their portrayal of beneficiaries. In one sense, they could have been referring future benefits that car drivers would see in congestion mitigation (or in time savings if BRT service frequencies increased enough to be competitive with the automobile). In another sense, they may have been referring to the current benefits for non-bus riders, such as the widened PMV lanes and the dedicated pedestrian and bicycle paths.

As the report also pointed out, one challenge to project functionality depends on the manner in which all road users interact with the features of the system: “There is not enough focus on traffic/driving and sustainability issues at the basic education levels” (Saxena et al., 2013, p. 36). The report argues that rampant parking on the footpaths and bike lanes “is totally against the concept of equal rights to the road [...] and undermines the basic essence of the BRT” (p. 62). They claim that in order for the system to function, it is each citizen’s “duty” to



obey traffic rules, but they also understand this will require innovative traffic enforcement methods (p. 64-65).

In short, the committee recognized that the system was facing many issues that required institutional, operational and design adjustments. However, they did not see these as justification for dismantling the BRTS or allowing for cars to drive in the bus lane. Rather, they argued that the system had already afforded benefits to some citizens of Indore, and further, that it had the capacity to improve conditions for all road users, contingent upon implementation of the recommended interventions. While they acknowledged that a lack of consultation with the citizens during the planning phases of the BRT led to public resentment, their recommendations to increase awareness of the benefits of the project – along with increasing driver education and enforcement efforts – represent cost effective measures that could improve safety and efficiency on the corridor, provided that the BRT was not encumbered by vehicular traffic.

Ultimately, they argued that allowing the system to function with cars in the BRT lane “puts a risk on the safety of the lives of the people and wastage of public funds” (Saxena et al., 2013, p. 68). In concluding, they drew attention to the international recognition for the iBus in being shortlisted for the Sustainable Urban Transport Award 2014, highlighting “the fundamental importance of a good public transport system and ensuring dedicated lanes for BRT for sustainable growth of a city” (p. 90). In the press, *DNA India* also reported on the prestigious honor in “Indore: Much maligned BRTS gets certificate of appreciation” (Chouske, 2013). In an effort to drive their point home, the final pages of the report are a compilation of newspaper articles detailing the various accidents that occurred following the High Court ruling.

While most of the news articles following the High Court ruling reported on negative developments, some reflected similar, positive outlooks from other stakeholders highlighting the *potential* of the system to affect positive change for commuters. During a visit in December 2013, civic activist Simpreet Singh advised, “The Indore residents should realise that the BRTS corridor belongs to them and they own the project” (DNA Correspondent, 2013, para. 3). Also in December, during a study tour with representatives from Indian Administrative Services, an official claimed, “The problems persisting on BRTS corridor are initial and temporary. With time, people will prefer traveling on this route through different means of public transports” (Chouske, 2013, para. 6). As of March, 2014, however, the court has yet to reconsider its decision, and cars remain free to drive in the BRT lane.

#### **5.4 Media Analysis**

In addition to the articles cited above, this study incorporated additional articles to examine the manner and frequency in which various news organizations framed issues, opinions, and attitudes as they related to the iBus. Included in this study were four media outlets: *The Times of India*, *Hindustan Times*, *DNA India* and *The National Herald*. *The Times of India* is the most widely circulated daily English-language newspaper in India. With origins in the Indian independence movement, *Hindustan Times* also sees heavy circulation across the country, second only to *The Times of India*. Launched in 2005, *DNA India* is an English-language newspaper that sees publication in Mumbai, Ahmedabad, Pune, Jaipur, Bangalore, and Indore. It ranks sixth in readership among English-language daily newspapers and primarily targets a younger audience. Having the least circulation among the four, *The National Herald* is an English-language daily that has had a tumultuous financial past. Although it ceased operations in 2008, it has seen minor growth in circulation during recent years.

**Table 3: Analyzed News Articles Reporting on iBus**

	<i>Times of India</i>	<i>Hindustan Times</i>	<i>DNA India</i>	<i>National Herald</i>	<b>Total</b>
Number of Articles	17	9	4	2	<b>32</b>
Print	6	9	0	2	<b>17</b>
Online	11	0	4	0	<b>15</b>
Titles: Positive Tone	0	1	2	2	<b>5</b>
Titles: Negative Tone	7	4	1	0	<b>12</b>
Officials Praising BRT	3	1	2	1	<b>8</b>
Officials Criticizing BRT	8	2	0	0	<b>10</b>
Public Praising BRT	0	1	0	2	<b>3</b>
Public Criticizing BRT	2	3	2	0	<b>7</b>
Officials: BRT Is Good for the Public	1	0	2	2	<b>5</b>
Officials: BRT Is Bad for the Public	5	0	0	0	<b>5</b>
Public Hardship due to Opening of BRT Lane	2	0	1	0	<b>3</b>
Accidents in BRT Lane	4	0	0	0	<b>4</b>
Project/Operation Complications	5	4	4	0	<b>13</b>
Narrow Vehicle Lanes	0	1	0	1	<b>2</b>

As can be seen in the table above, out of the 33 articles included, 14 alluded to project or operational complications. There were 12 with negative titles and 5 with positive ones. There were more instances of officials, experts, agency representatives or activists criticizing the BRT than there were instances them praising it. It should be noted that “praising” or “criticizing” included optimistic or pessimistic projections concerning the future performance of the system. Among media portrayals of the public, there were 7 instances of negative attitudes expressed and 3 instances of positive attitudes expressed towards the BRT. While there were 10 instances of public figures offering opinions of how the BRT has (or will have) affected the citizens of

Indore, these were equally split between positive and negative assessments. Due to the data limitations of this study – in only accounting for English-language, print sources – it is difficult to draw strong conclusions from the nature and frequency of the frames through which these media organizations presented issues and opinions. That being said, within the given data set, news sources during this time were more likely to present negative attitudes toward the BRT from citizens, public figures, and from the article titles themselves.

## **5.5 Discussion**

In this section I will discuss the manner in which opposing sides interpreted the various contested themes and how this formed foundation of their arguments for or against Indore's BRT. I place special focus on each side's definition of public beneficiaries as they relate to Indore's travel mode-share and explore what this may reveal about their own perceptions of BRT.

The circumstances surrounding the court proceedings reveal that the petitioners and the respondents maintained quite distinct narratives that they employed to justify their arguments for and against the BRT. The competing notions on the greater good largely played out as an issue of existing resource allocation versus potential, long-term gains: should the city accommodate actual travel behavior and attempt to alleviate congestion for motorists, or should it plan for an unrealized mode-share that could eventually result in long-term gains for multiple types of road users? The BRT committee did not contest the fact that the dedicated busway was carrying a disproportionately lower share of riders compared to the overall traffic flow of the corridor. Rather, it saw the delayed improvements from the system as justification for allowing the BRT to temporarily underperform.

Aside from short-term versus long-term gains, another important distinction between the two “public good” narratives was the manner in which each side defined the public. From the petitioners’ standpoint, the affected “public” was comprised of the drivers who saw no benefit or, allegedly, were experiencing difficulty due to the project. They often invoked the term “public at large” or “general public.” For the BRT committee, the public included “the citizens of Indore, bus users as well as other vehicle users” (Saxena et al., 2013, p. 36). This tactic enabled them to draw attention to the benefits that the BRT had afforded for traditionally marginalized road users – women, children, elderly, disabled, cyclists, pedestrians – but also the congestion mitigating potential that could benefit motorists as well.

Although the High Court acknowledged the utility of quality public transit for the development of the city, it ultimately sided with the petitioner’s narrative of what constitutes the greater good – immediate gains for the largest number of road users. To understand this point, it is necessary to revisit the original High Court decision. It ruled “in the interest of the public at large,” and due to the “urgency in the matter, this Court can not wait in the taking the decision for an indefinite period.” Thus, though the judges understood the BRT had the capacity to improve traffic conditions, they believed it had inconvenienced a large part of the public for too long.

Implicit to this line of reasoning was the assumption that the BRT was responsible for the traffic woes of the corridor. While the “greater good” argument was predicated on competing notions of what *should* be, the discourse surrounding traffic problems involved issues more of cause and effect. On one hand, the petitioners claimed that the BRT caused traffic problems. On the other, the respondents claimed that traffic was problematic before BRT and that it could get better with improvements to the system. Although there was no comprehensive study to

demonstrate that traffic had worsened following construction of the system, the petitioners brought forth this allegation both before, i.e., “projected difficulties,” and after services began, i.e., “problems are being faced by the general public.” Even before its ruling to allow cars in the busway, the High Court, too, began to adopt language based on this assumption of causality, ordering the expert committee to “take into account [...] the day to day problems faced by the general public *due to BRTS*” (emphasis added).

While the petitioners stressed that the dedicated busway was carrying a disproportionately smaller percentage of corridor traffic, neither they, nor the judges, addressed the argument that BRT construction maintained or widened the road width that was available to automobiles prior to implementation. Just as the Commissioner suggested about the private motorists, perhaps the petitioners and the judges also grew accustomed to the temporarily widened road prior to the installation of the busway. Although photo evidence reveals that the entire roadway was widened to accommodate the BRT and existing motor vehicle lanes, at this point perception dictated reality.

This brings us to the final theme, that of public participation. Unlike the previous two themes, which are largely contested, the notion of public participation receives comparatively less treatment within the proceedings, especially from the petitioners. While the Divisional Commissioner and members of the BRT Committee acknowledge that a lack of public involvement is partly to blame for general resentment towards the project, the petitioners only raise objection to the fact that the city did not issue a proper notification to the authorities, which is “necessary for the convenience of the public at large” (Kodwani v. State of M.P., 2013). They make no mention of the actual outreach efforts conducted by the transit agency, although the lack of public involvement in this regard could have also been a point of contention. Rather, and

considering this issue was not raised until their second petition in June of 2013, it seems the primary motivation was not to criticize the public process, but rather to serve as justification for suspending the project entirely.

On the other hand, while the respondents' discourse places more of a focus on public involvement, the only mention of participation *during* the planning process itself occurs once in the BRT Committee Report: "Public was not consulted while project was being planned, which has led to much resentment towards the project" (Saxena et al., 2013, p. 36). All other mentions of the public process, whether in reference to previous problems or future recommendations, are less participatory in nature, e.g., "communicating the features, benefits and changes," (Office of Divisional Commissioner, Indore, 2013, p. 10) and "imbibing a positive driving and sustainable travel culture right from the childhood" (Saxena et al., 2013, p. 36). Thus, although the Commissioner and the BRT committee acknowledge that a lack of public participation has led to a contentious implementation, their discourse from the court proceedings suggests a disregard for participatory planning at this point in the process. As they voiced in the previously discussed narratives, from the standpoint of the BRT advocates, if given the time and resources to operate fully, the results of the system should speak for themselves.

While the BRT Committee made it a point to conduct on-site surveys to demonstrate rider satisfaction with the BRT, the judges made no specific reference to bus riders in their order to invite suggestions from the general public. In fact, throughout the entire deliberations, neither the petitioners nor the judges made reference to the bus riders or the benefits they stood to gain or lose from the outcome of the rulings. While they claim the BRT to be causing difficulty for the public at large and leaving a "narrowly lane for the ordinary private vehicle" (Kodwani v. State of M.P., 2013), the riders are only referred to as the 3% of traffic.

Though media portrayals of the citizens of Indore included statements from transit users and rider satisfaction surveys that attested to the improved mobility benefits for bus riders, its portrayals of the “general public” also seem to discount this group as a minority. In consideration of statements, such as those from the High Court judge, who maintained “that the public interests reigned supreme while he delivered verdict in any case” (TNN, 2013, para. 3), or the article on the five-member committee investigating the BRT’s “shortcomings that are creating problems for people” (Jha, 2013), it is evident that bus riders did not constitute the most important piece of these conceptualized “public interests” or “people.”

Looking to the actual mode share percentages in the city, it is possible to understand why this portrayal persisted among news articles and the relevant actors whom they quote. As discussed earlier, in 2010 the largest mode share in Indore was the personal motor vehicle (PMV) at 37 percent, with a majority of these being two-wheelers. Following was walking at 27 percent, bicycling at 20 percent and public transport at 16 percent (Ray & Bomberg, 2010). If an actor sees the BRT solely as a service that benefits transit riders, and further that it is exacerbating the commute for motorists, then it is not difficult to understand their justification for acting in favor – of what they perceive to be – the majority. On the other hand, if one sees the BRT as a more comprehensive system that improves mobility and accessibility for transit riders, pedestrians, and cyclists, then it is also possible to understand the perspective from those who advocated for the BRT. However, as the news articles also reveal, there was more to the story than simply who stood to benefit from the system.

Being that there were problems with acquiring the necessary number of buses to account for ridership demand among all forms of public transit, and considering that the new infrastructure for pedestrians, cyclists and disabled users did not effectively address all practical



needs for these groups, the BRT had too many issues to accommodate for a mode share that was representative of Indore's population. Likely due to this reason, those who advocated for the BRT most often stressed the future benefits that the system would afford to road users once certain mechanisms were in place and once travel behavior had shifted. This conflict – between accommodating current travel behavior versus planning for more sustainable travel behavior – played out in both the media narratives and the court proceedings.

Although the media reported on arguments from both sides and also described accounts that were representative of the successes and failures of the system, articles during this time were more likely to portray project complications and negative opinions from public figures and members of the public. Furthermore, the titles of the articles themselves were also likely to set a negative tone for the news story. These news articles served as an arena to present contested facts. While some were unfounded or required clarification, they all were published and therefore had the opportunity to influence the perceptions of the public and officials.

## **6.0 Conclusion**

This case study reviewed the competing, public narratives that framed the implementation process and court proceedings of the BRT. In analyzing the arguments of both detractors and proponents of the system, I found a fundamental difference in the understanding of contested themes that formed the basis for each side's argument. While BRT supporters stressed the potential, future benefits that the system could afford all road users, those who fought the BRT did not believe that the low level of transit ridership warranted a dedicated bus lane. In presenting and depicting traffic problems on the corridor, those arguing against the BRT placed blame on the dedicated busway as the main culprit for congestion. Meanwhile, those arguing for the BRT claimed these problems were ongoing and often framed them as an opportunity for improvement through BRT operations. Finally, although both sides agreed that the implementation process lacked adequate public participation, opponents used this as justification for suspending the project while supporters saw it as an opportunity for improvement.

These conflicting arguments draw on different interpretations of the public interest. Stakeholders on either side of the debate were acting in what they believed to be best for the public, however defined. Competing notions of who benefited, as well as when – or if – these benefits would come to fruition, legitimized two very distinct solutions. As detailed in the literature review, how planners and policy makers define the public interest can result in disparate impacts among different groups. If there is solely a focus on outcomes, the policies and projects in question may fail to gain legitimacy among citizens. If there is solely a focus on process, it may result in inequitable outcomes for minorities or groups that lack resources to mobilize. Arguably, this is what occurred in the case of Indore's transit riders. Being that iBus

users were unable to effectively organize, and considering that financing a court petition and a trial attorney poses quite a financial burden, it is not too surprising to see that the court ruling disproportionately harmed transit riders. As this study demonstrates, the BRT did not take road space from automobiles. Moreover, the institutions that sponsored the project approved funding specifically for a BRT, not a road-widening project. However, being that the petitioners in question had the time and financial resources to fight the project, they had the platform to effectively argue their case. Transit riders – both current and future – never had this voice.

There are several lessons planners can learn from the implementation process of Indore's BRT. Many cities have turned to this mode of transit as a cost-efficient, exportable model to improve safety, mobility and accessibility along their road networks, but the case of Indore attests to the power of public sentiment in affecting operational outcomes. For example, though data collection and research can demonstrate that BRT has the capacity to improve road conditions, and though simple photo evidence can prove that a dedicated busway did not take road space from motorists, the general public and key stakeholders do not have to accept these as facts. The eventual High Court ruling, based on its interpretation of the public interest, is indicative of the influence that perceptions can have on project implementation.

The media plays an important role in portraying these public attitudes for a broader audience. While it is impossible to definitively prove to what extent media narratives influenced the judges who delivered the final ruling, it is worth considering them in context with the other means they had to gauge public sentiment. Aside from the arguments presented in court, and perhaps their own anecdotal conversations and interactions, news articles would have provided a condensed, cohesive portrayal of events that could have helped form their perceptions of public attitudes. The fact that media outlets present themselves as objective, unbiased and fact-based

lends to the perceived legitimacy of their reports. As Herman and Chomsky (2002) assert, “Partly to maintain the image of objectivity, but also to protect themselves from criticisms of bias and the threat of libel suits, they need material that can be portrayed as presumptively accurate” (p. 19). Furthermore, although it is possible to clarify an issue through careful observation and analysis, this “tells us nothing about whether that fact received the attention and context it deserved” (Herman & Chomsky, 2002, p. lxiii). In other words, even when newspapers publish corrections to clarify past errors, these errors were still published and thus had the opportunity to influence readers.

This case study also attests to the vulnerability of BRT in localities that lack traffic enforcement and safe travel behavior. Although the launch of iBus saw the incorporation of design and operational elements from successful BRTs in other parts of the world, the system had to contend with unsafe and unlawful travel behavior from the start. During my time in Indore, I often witnessed motorists driving and parking on the sidewalks and bike lanes, motorists driving against traffic to avoid the bus lane barrier, and pedestrians walking in the bus lane. In consideration of Indian road users’ propensity to flout traffic rules and the police’s lack of capacity or willingness to enforce them, these conflicts should come as no surprise. This is not to say that BRT cannot serve as an effective tool for safe, efficient transit in the Indian context. In fact, Janmarg, the BRT of Ahmedabad, has a daily ridership of over 130,000 on a 47-mile network with new construction underway. However, it is important to note that Ahmedabad’s level of success with BRT has yet to be seen in other Indian cities.

From a transit advocacy perspective, these notions speak to the importance of community participation and outreach. In Indore, public involvement could have included initiatives to counteract unsafe travel behavior. Outreach efforts could have fostered community ownership of

the BRT that passes through the city's neighborhoods, thereby improving local legitimacy and influencing road users to interact with the system in a more respectful manner. As Fischer states, "a good deal of experience shows that citizen involvement in both defining the problem and solution is important to building legitimacy" (2000, p. 217). However, likely due to a largely absent participatory process, it struggled to gain legitimacy even after it was physically in place.

Although Indore's BRT vastly improved travel time and comfort for transit riders and was shortlisted for a global sustainability award, there remained a large portion of the public who perceived the system as an unfair allocation of resources. Further, although BRT has a demonstrated capacity to mitigate congestion and improve safety for multiple types of road users in other urban contexts, the perception prevailed that the iBus would only benefit a small percentage of transit riders. Being that citizens' non-cooperation and resistance to BRT compromised the functioning of the system before it could fully demonstrate its benefits to the community, it seems a lack of perceived legitimacy towards the project severely hampered its ability to improve travel for more than transit users.

Currently the iBus is slowly regaining ridership. Transit agency representatives report that with the addition of new buses, private automobile users are finding it less convenient to drive in the BRT lane (A. Roy, personal communication, February 21, 2014). However, until the authorities allow the system to operate as a fully-functioning BRT, it remains to be seen if the iBus will be able to improve traffic conditions for all travelers on A.B. Road.

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