Plan B: Practical strategies to improve planning in Indian cities

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Introduction

Recent interventions by the central government have tried to reform and improve planning processes in India, largely by demanding that cities and agencies in control of urban areas create new plans. Such plans seem to have so far had a negligible effect on improving the problems facing urban areas, in part because such plans follow the same planning process that existing and failed master plans for the city have followed.

By focusing exclusively on creating new plans, we argue that new planning interventions are missing an important opportunity to intervene in urban planning processes in India: namely, by providing tools and incentives for those government actors who currently do exercise significant control over urban spaces to improve their practices. These are actors that are not traditionally classified as “urban planners” but who regularly put together and implement projects that re-shape the city or re-shape particular neighborhoods within it. Such actors include engineers and bureaucrats in the city government, elected municipal councilors, and employees of para-statal agencies like the housing boards, development authorities, and utilities.

This paper draws from two cases in the city of Chennai where the Transparent Chennai project worked with such actors. Using a set of low-cost and simple tools that utilize improved mapping and data management tools that have recently become cheaply and widely available, our interventions in these cases supported these urban actors in effectively addressing civic concerns, and addressed some of the constraints within which they work. Our experiences from these cases suggest that effective responses to urban problems may also include changes not just in city-wide plan-making, but in providing the city’s de facto planners a practical set of tools with which to improve project creation and implementation.

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3 The authors would like to thank Priti Narayan for excellent research and field support in leading the intervention in Ward 57, and Prabu Raja for technical support for the paper and virtual mapping processes. The work on the two cases draws from on-going research undertaken by Transparent Chennai. In addition to funding from HUDCO and ICRIER, we gratefully acknowledge the support for these research engagements extended by the Asia Foundation, the IDRC and the World Wide Web Foundation.
In 2005, the central government announced a new program called the JNNURM, decisively ending years of neglect towards Indian cities. The JNNURM was designed to increase the central government’s control over cities. The program made large amounts of central government funding available for large-scale investments in urban infrastructure, in return for cities and states implementing certain policy changes. Because decisions about the projects selected for funding were made by committees housed at the Ministries of Urban Development and Housing and Urban Poverty Alleviation, the central government was able to now push cities to make investments in traditionally neglected areas like water, sewerage, heritage, and other areas. And because receiving funding was contingent on implementing certain policy changes or “reforms,” as the JNNURM guidelines called them, the central government was also able to intervene directly into planning and decision-making at the city level, something that had earlier been the exclusive purview of the state governments.

One of the most widely discussed changes in the JNNURM was in the arena of planning. The JNNURM required cities to make a City Development Plan, a plan that was supposed to create a vision for the future of the city and to identify the infrastructure projects that would move the city towards that vision. Such a requirement for a new plan was common to other central government interventions that came afterwards, including the Rajiv Awas Yojana, and the National Urban Sanitation Program. Suddenly, cities that participated in these central government programs now had a proliferation of plans. In addition to the Master Plan, created for most cities by their Town and Country Planning Departments or by city development authorities, cities now had City Development Plans, City Sanitation Plans, and Slum-Free City Plans of Action.

Although the guidelines for drawing up these various plans show that there were supposed to be important differences between the new plans and existing Master Plans, the central government did not insist that cities follow these guidelines. For example, unlike most master plans, all new plans were supposed to be made with significant amounts of citizen participation. For example, the newest revision of the toolkit provided by the Ministry of Urban Development for the CDP states that “stakeholder consultations

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need to be conducted time and again during the CDP preparation process.\textsuperscript{6} The Rajiv Awas Yojana released a document titled “Guidelines on Community Participation” which suggested that NGOs or CBOs should be appointed to act as intermediaries between the government and slum residents, and should be involved in both the enumeration and surveys of slums as well as the planning. However, in many cities plans were approved without significant or even any citizen participation.\textsuperscript{7}

These plans were also supposed to be based on extensive new data collection. For example, the “Checklist for the City Sanitation Plan” stated that cities should have carried out baseline data collection on everything from access to sanitation in residential areas, the location and status of public toilets, drinking water quality and coverage, to maps of all city water and sanitation related infrastructure.\textsuperscript{8} However, most cities did not undertake new studies and used whatever limited and faulty data was already available to them to meet the plans’ requirements.

More importantly, these plans faced the same pitfalls that faced earlier plans in India. Although there was a long tradition of planning practice in India that predated Independence, most city plans have failed in controlling city growth. Some problems were external to plans and planning institutions. Plans were disempowered because the provisions outlined in them were not given any budgetary support by state or city governments. In larger cities, plans failed because state governments created para-statal institutions like water utilities and housing boards that took over many of the functions originally given to city governments. In practice, this meant that the projects outlined in city master plans would remain on paper unless para-statal agencies voluntarily took them up, which rarely happened.\textsuperscript{9}

Plans also failed because of internal reasons. For example, the processes set up for controlling city growth were cumbersome, and created bloated and corrupt city planning agencies.\textsuperscript{10} As a result, much of city growth across India happened outside of planned


\textsuperscript{8} National Urban Sanitation Policy “City Sanitation Plans Self-Review Checklist: An aid to Cities for ensuring quality while finalizing the draft of the CSP for submission.” New Delhi: Government of India, Date unavailable.


\textsuperscript{10} Ibid.
areas. For example, only 20% of Bangalore grew according to the plan, and only 24% of Delhi’s residents live in planned colonies. Illegal or non-plan constructions are not just limited to the poor, as is commonly assumed. The Alternative Law Forum describes a range of illegal constructions and uses of public space by the middle-class in Bangalore, from widespread violations of building bye-laws and zonal land-use regulations to the use of “black” or unreported money for nearly all real estate transactions.

New urban planning interventions, rather than actively addressing these problems, simply created new plans that followed the same processes and faced similar issues. Perhaps unsurprisingly, increasing evidence suggests that these new plans were not very effective in addressing new urban crises. Like the master plans that came before them, the new plans were not empowered to have a large impact on urban space or even on the implementation of the programs under which they were created. For example, a review by the Hazards Center found that out of 24 CDPs, a third clearly did not have any relationship to the projects that were funded in those cities by the JNNURM. For the other two-thirds, the study could not find the necessary information on plans and projects to analyze the relationship between them.

**Transparent Chennai’s Response: Crafting practical tools for practical planning**

Although plans are largely ineffective, there are clearly a large number of government actors who are controlling and impacting urban spaces. These include large government agencies like the Slum Clearance Boards, Housing Boards, Development Authorities or city offices that give planning and building permissions, water boards and other utilities, and city governments themselves that build roads, bridges, and flyovers, collect garbage, and maintain traffic. In this paper, we argue that recent urban planning interventions have failed to look at the possibilities in empowering those engineers and bureaucrats who identify, write, and implement projects at these agencies and departments.

Academic literature on improving government functioning has taken this approach before. A slew of research argues for the importance of so-called “frontline workers” or “street-level bureaucrats.” These are the lowest level of bureaucrats, whose collective

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actions ultimately define how a policy is experienced by citizens.\textsuperscript{15} A number of other authors have also discussed taking an incremental approach to policy improvements, most famously by Charles Lindblom in his essay on “muddling through.” Genevieve Connors, in her piece on the Bangalore water authority, suggests that a series of small changes marked a shift in the way that the utility dealt with informal settlements, and that such small successes should be documented and disseminated within the organization.\textsuperscript{16}

Below, we present two cases where Transparent Chennai has successfully deployed tools to improve the actions of these “frontline planners,” government actors that are not considered planners but who nonetheless have large impacts on urban space. We believe that these cases articulate a missed opportunity in improving planning processes in Indian cities today. As Connors suggests for water sector workers, the successes highlighted in the cases in improving the locations of new public toilets or in allocating scarce resources within a ward need to be recognized, documented, and widely disseminated as examples of ways in which these frontline planners can improve their efficacy even within the constraints they face.

\textbf{What is Transparent Chennai?}

The Transparent Chennai project was started in 2010 as a response to the complex and rapidly changing urban policy environment. The project was created to support residents, particularly low-income residents, to better advocate for improvements in their living conditions in a rapidly changing policy environment. The project does this by collecting and creating information that can highlight the needs of low-income residents and monitor government performance over time in addressing those needs. The project creates and disseminates this information to a wide network of citizens, media, and government.

We began our work by collecting existing government data about the city, something that still occupies a large amount of our time. Using publicly available sources, personal requests, and most frequently, Right to Information Act petitions, we aggregate existing government information on things like slum records, water points, public toilets, footpaths, bus routes, and others. Accessing government datasets, even under the Right to Information Act, can require repeated visits to the concerned offices, and does not always yield results. When information is provided to us, it is often in formats like paper printouts or photocopies of hand-written lists that are difficult to share and use. The Transparent Chennai team then processes this information into formats that can be most

\textsuperscript{15} Such literature draws from the work of Michael Lipsky, who wrote with Richard Weatherly about reform in the special-education sector in 1977, and how teachers coped and implemented these changes.

easily understood, analyzed, and shared. This can be a time consuming activity: many datasets have to be typed up manually, and lists of locations need to be converted into digital maps. Beyond collecting basic city information like administrative and electoral boundaries, we have focused primarily on three inter-related issues: slums and other informal settlements and land policies; access to water and sanitation, particularly the issue of public toilets; and finally, walkability and pedestrian infrastructure.

We also conduct research on city governance to provide a context for this data. We document planning and decision-making processes in the city to understand how data is produced and used. Such research requires interviews with individuals within these agencies, including lower-level bureaucrats who are responsible for collecting and updating datasets, as well as higher-level bureaucrats responsible for making decisions about agency activities. In addition to understanding the context for data, such research also helps us to understand how citizens can most strategically intervene in addressing civic issues. For example, we have tried to understand how slum areas and other informal settlements are classified by the city, and how the different agencies that are responsible for providing water and sanitation to the city treat these different categories of settlements. This information has helped us to support residents in making more targeted demands for accessing services.

Unfortunately, as we started looking more closely at government data, we found that it is extremely problematic. Information is updated infrequently and stored poorly, and it is not shared between departments even when it is required for more effective planning and service provision. Existing municipal datasets are also often incomplete or incorrect in ways that leave out the urban poor. This is because much of the urban poor lives and works in informality – they work in unrecorded economic activities and live in unrecognized settlements, and their workplaces and homes are not accounted for in municipal datasets. Information is also not available at a resolution that allows residents to understand its relevance for their own day-to-day experiences of the city. Most data does not even allow residents to connect service quality to particular constituencies and elected representatives, and to monitor government performance over time, especially at the neighborhood or ward level. This lack of data has allowed the government to evade providing basic entitlements to all city residents, and sometimes has allowed the government to exercise force over informal settlements and workers without any ill consequences.

As a result of these problems with municipal data, wherever we have found it useful and feasible, we started creating more accurate data, often in partnership with citizens’ groups and often in the form of maps. More recently, we have also partnered with government actors in these efforts. In our work, we emphasize low-tech, participatory methodologies
to gather information about infrastructure and civic problems, such as getting residents to mark local or informally held information on paper maps. We found that such methodologies are inclusive – they do not require familiarity with computers or English – and effective at creating a sense of community among participants. We have created data strategically, to draw attention to issues that were invisible because they were largely faced by residents of informal settlements or informal workers, or to bring attention to important gaps in existing government datasets. This self-generated or citizen-generated data has allowed us to have important insights into civic services, some examples of which are described in the sections below.

All of the data and research we collect and create is shared widely, in both Tamil and English. We write short ‘Issue Briefs’ that contain summaries and analysis of our research and data and publish them in both English and Tamil. We have a website with an active blog on civic issues, an interactive map with all of the information about the city and civic issues that we have collected, and where all of our publications, datasets, and maps are available for download. Most importantly, we share our findings through frequent public and individual meetings and presentations. These meetings take place with community groups, and we also share our findings regularly with government officials and the media.

So far, our work has had some promising results. In recent months, we have seen increased demand from both community groups and the media for our research and data, and we have been asked to make presentations to a wide range of organizations in Chennai. There have also been positive responses from the government: our research and inputs from our researchers have gone into official planning documents like the Five Year Plan for the state, and we have been invited to internal government discussions on some important urban policy issues.

More importantly, issues on which we have done considerable work, like public toilets and slum policies, are also areas where government policies have recently changed or are in the process of changing. For example, the Corporation of Chennai is planning to double the number of public toilets in the city, and the Slum Clearance Board is planning to redevelop an unrecognized slum in-situ for the first time in two decades. In part, these changes are due to the enabling environment created by the JNNURM and RAY, which have forced municipal governments to pay attention to long neglected issues like improving slum housing and access to basic services. However, Transparent Chennai’s work has helped to increase awareness about the pro-poor aspects of these programs and has led to increased pressure on the government to implement such measures. With the central Ministry of Housing and Urban Poverty Alleviation recently committing to a National Urban Livelihood Mission along the lines of the Rural Livelihood Mission, it...
seems that the trend of increased central government intervention in cities is going to expand even further. This means that the money and opportunities available to cities to improve their treatment of the urban poor will further increase. This also means that the role of citizens in pressuring the government to adhere to new policies and monitoring their performance will become all the more important.

The two cases below discuss two interventions where we have used similar methodologies that we used with community groups to help government officials improve their own planning practice. It turns out that government officials face similar obstacles in accessing and using information about civic issues that residents do. Our objective was to use simple processes that employed simple technological tools to collect high-quality spatial data and create easily-understandable visualizations of the data that could inform planning. Our efforts also built the capacities of residents and officials to understand and use the data. The process was not always neat and clear, but went through multiple iterations to incorporate the idiosyncrasies of the institutional and individual actors involved. What we found is that while a large part of the methodology – the data collection, the visualization – can be easily applied to other contexts, ensuring that such tools are impactful requires working closely with the key stakeholders in the government to ensure that decisions are actually taken on the basis of better data.

Case 1: Can Municipal Councilors Plan Better for their Wards?

Municipal councilors are ignored urban actors

Municipal councilors have a range of official and unofficial powers that can improve conditions at the ward level. In Chennai, as members of the Corporation Council, they can propose and pass resolutions that are binding on the city government, and they can ask questions and make speeches to draw attention to problems in Council meetings. They also have discretionary funds of Rs. 30 lakhs\(^\text{17}\) that can be spent annually on projects in their ward.

However, their role goes far beyond these official powers. A range of literature has highlighted the important role that municipal councilors play in urban areas, particularly in providing access to basic services for the poor. For example, in Bangalore, Solomon Benjamin argues that poorer groups in what he calls “local economies” engage primarily with the institution of the municipal corporation, and councilors are the “key mediating agents.” His field work shows that participants of these local economies, who live largely outside of planned areas of the city, use a range of strategies to access tenure security and basic services through links with councilors and lower-level bureaucrats, strategies that

\(^{17}\) This number has steadily increased since 2007.
defy the easy labels of “patronage politics” and “petty corruption.”

Similarly, Anuradha Joshi and Suneetha Kacker found that residents of an informal settlement in Delhi organized to get better access to water, and were supported in their efforts by opposition politicians who pressured the water utility to provide tube wells in the settlement.

Councilors sometimes take on the responsibility for maintaining key services. For example, Transparent Chennai’s ongoing survey of public toilets has revealed that nearly 60% of the toilets surveyed have caretakers who collect a fee for the use of toilets. Fees for toilet use were officially banned a few years ago, and our fieldwork suggests that a number of these caretakers have made informal agreements with councilors who give a portion of their revenues back to councilors. In planning for new public toilets, senior officials told us that they wanted private businesses involved so that the scope for councilors to influence service provision would be minimized or eliminated. Whether or not their presence leads to better outcomes, it is clear that councilors play an important role in shaping conditions in their ward.

Yet, official documentation downplays this role. Although our interviews with junior engineers and ward residents repeatedly confirmed that complaints about civic services like public toilets most frequently came through councilors, such complaints are not taken into account in the city’s official grievance redressal systems nor is the substantial role of the councilors mentioned in organograms about things like public toilet provision and maintenance.

.Transparent Chennai’s intervention

Our intervention in ward 57 was shaped around our understanding of the large but often informal role of councilors in improving conditions in the ward, the problems that residents face in working with them, and the constraints councilors themselves faced in taking action in their wards. We made considerable efforts to identify wards where the councilor demonstrated a high willingness to try a new way of engaging with residents.

The ward councilor in 57, Mr. Arulvel was enthusiastic in our first meeting, and committed to attending a public meeting to discuss the data and interact with the people about gaps in service delivery in the ward.

We recruited volunteers and student-interns to collect information about the ward using paper maps and brief surveys on three issues: garbage, community water taps, and public

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20 Meeting with Respondent 4, Respondent 6 and Respondent 12, Corporation of Chennai, October 4, 2013
toilets. The effort revealed striking findings. The mapping and survey found that there were a total of 8 public toilets in the ward. Of these, three were men-only facilities, and one was a women-only facility. In total, there were seven toilet facilities for men, and only five toilet facilities for women in the whole ward. Only one facility for men and women each were deemed dilapidated but usable, and both were in the western parts of the ward, where the Kalyanpuram and Jutkapuram slums are located. One women’s facility, located at the Amberson Street – Audiap Naicker Street junction, had actually been closed for 6 months at the time of mapping.

![Map of public toilets in Ward 57](image)

Although there was garbage all over the ward, it was clear that the worst off area was Kalyanpuram, a community of approximately 1,000 households located on the Western end of the ward along the banks of the Cooum River. The neighborhood is located near tenements built by the Slum Clearance Board, but it is not an officially recognized slum. This means that residents do not have tenure security or legal access to individual water and sewerage connections, and, therefore, depend heavily on public or shared services.

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21 Toilets that were considered unusable lacked one or more of four key pieces of infrastructure: water, functional plumbing (ie, no blockages), doors, or cleanliness.
Given the extreme concentration of garbage in the Kalyanpuram area, we reached out to residents there using our contacts at a local NGO and organized the public meeting. The first meeting took place in April of 2013, and was attended by a large number of community members and the councilor. We presented the maps of the ward with our findings. The heated discussions that followed provided further details on these problems. There were only one dustbin in the area, and it was always overflowing with garbage. The frequency with which garbage was collected from the dustbin was erratic and conservancy workers were no longer involved in cleaning the streets. Whenever a conservancy worker would come, residents were so grateful that they paid him Rs. 10 per household. Garbage had also accumulated along the neighborhood’s internal roads and in an extremely large pile next to the Cooum River, where many residents from the slum actually ended up dumping their uncollected garbage. Residents alleged that this pile had become a breeding ground for mosquitoes, and had caused several health problems.

Although the area contained one of the only two working toilets in the ward, residents also had a number of complaints about the toilets. They claimed that the toilets were open only between 5am to 10pm, and women complained about how they were unable to use
the toilets at night. Women also complained that they were reluctant to use toilets because of their lack of privacy. Apparently, the buildings adjacent to the toilet are quite high and the toilets did not have adequate roofing. The lighting in the toilets was inadequate, further reducing the comfort and security for women, especially at night.

Given the extent of the problems, especially when compared to the rest of the ward, the residents and the councilor committed to regular monthly meetings to follow up on the issues identified in the data collection and discussed in the meeting. Transparent Chennai has since facilitated six monthly meetings in the neighborhood, all of which were attended by the councilor and Kalyanpuram residents.

Over this time, several changes took place in the area: the councilor arranged for new tiles to be installed in the toilets, built a sun-shade over the neighborhood’s main washing area and a cement drain connecting this washing area to the main sewer, installed tiles for the smaller washing area towards the rear of the neighborhood, and arranged for a new cement-concrete road in the neighborhood.

However, the most palpable difference was in garbage collection. Earlier, the only dustbin in the area was along the main road. Those who lived near the road dumped their garbage there, and those who lived closer to the canal dumped their garbage in the canal. The councilor first had the large garbage pile along the canal removed, and residents claimed this was the first time in many years that such a cleanup had taken place. The councilor also provided small dustbins for every household in Kalyanpuram, and as of August 2013, a garbage collector comes through the lanes of the neighborhood with a pushcart everyday at 7am. Residents only have to walk till the end of their narrow lane to empty their bins in the pushcart. Since the lanes are too narrow for the pushcart to enter, the residents have suggested that one resident per lane was nominated to ensure that all households in that lane emptied their bins regularly in the pushcart. Significantly, the residents do not pay the conservancy worker for garbage collection services any more.

Before the intervention, the councilor had made very few visits to the slum since his election to the position of councilor in October, 2011. Now he visits twice a week, and has begun participating in social functions celebrating births and weddings, deaths and other gatherings. He has also provided the neighborhood cricket team with jerseys and balls. The residents believe that it is the councilor himself who paid for the household garbage bins and for the repairs on the toilets, and that he has been able to get the Corporation to build the road and provide regular garbage collection service in the area.

Discussion: How did this intervention address problems with and constraints facing municipal councilors?
As discussed earlier, much of the literature on the role of councilors in India talks about their clientelistic relationships to areas they represent, referred to – often disparagingly – as “patronage politics” or “vote-bank politics.” Although scholars like Benjamin have argued that such relationships between councilors and residents are more complicated than these negative terms suggest, scholars agree that most councilors do not systematically respond to ward concerns. Rather, they respond to individual complaints, and often complaints from party supporters and those with individual connections to the councilor are prioritized.

In Ward 57, the findings from the survey initially served to reinforce existing neighborhood fears about the patronage politics practiced by the councilor. The maps were used to anchor the first and second public meetings in Kalyanpuram, and helped in focusing the discussion on concrete problems. Residents initially despaired, because they believed that the maps were “proof” that the councilor did not like the people in the slum. Although it is not possible to get information about voting patterns in the ward, residents believed it was because they had not voted for him. Yet, the maps also helped to move the councilor beyond working for his party’s supporters alone. The councilor clearly found the maps useful. He asked if he could keep the maps for “future reference,” because they helped him to “visualize the ward’s problems better.” He also began to systematically address problems identified in the survey, and the issues raised by residents in the monthly meetings. An article written about the councilor’s improvements in the neighborhood said the following: “[He] has 117 streets in his ward to monitor. “It takes three months just to survey them all. We are short-staffed, so it is difficult to address the specific needs each community has.” Transparent Chennai’s surveys helped in setting the priority, says the councillor.”

Our interviews with ward councilors in Chennai have suggested that these problems are common to many councilors, and that councilors themselves are limited from moving beyond clientelistic or individualized relationships with their constituencies because of the lack of adequate information. Councilors reported different ways of getting information about civic problems, but even the most proactive councilors did not have means of getting holistic information about the ward. Most councilors reported that they “make their rounds” every morning, meeting residents and doing inspections, while others stated that they make evening rounds as well. However, such rounds do not cover the whole ward. One councilor told us “I go on rounds every morning at 7am. I ask people for grievances then…I am on rounds till 9.30am. There are 112 roads in my ward

22 Discussion at the public meeting, Ambedkar Community Hall, April 18, 2013
and I cover 10 to 20 roads a day.”\textsuperscript{24} Some reported holding public meetings and meetings with resident welfare associations. Councilors also received complaints by phone and in person at their offices, either at the ward office or in local party offices, or at their homes. From interviews, it is clear that councilors did not have consistent access to ward-wide information about issues, or information that could help them prioritize between problems in the ward. Instead, most councilors simply responded to complaints from individuals. Tools that provide better information about ward level problems, such as the simple survey exercise that we conducted, could help councillors move beyond their individualistic and transactional approach to civic issues. Such tools could also help councillors win more supporters and break out of the traditional modes of party action. Low-cost, low-tech data collection about ward level problems could provide evidence of impartial and need-based actions taken by the councilor for the ward, evidence of efficacy which could lure residents to vote across party lines in future elections.

Our interviews with councilors also revealed that councilors themselves face a large number of constraints in taking action on civic problems. Many councilors reported difficulties in making junior engineers in the city and in the utilities respond to their complaints. Indeed, the nature of the relationship between elected councilors and JEs seemed to strongly determine the quality of service provision in a ward. These problems were particularly true for councilors in the opposition party. One such frustrated opposition councilor told us: “Though it is there on the paper, there is no power to the councilors in reality.”\textsuperscript{25}

The ward councilor in 57 faced similar problems. In an interview with him, the councilor said that he did not have a good relationship with the Junior Engineer (JE) from his ward. He alleged that the JE often promised to do work, but did not complete his tasks on time, leaving the councilor to contract workers himself to get the job done. The councilor confided that he believed the JE was a member of the DMK political party, who did not want to cooperate in carrying out welfare schemes of the AIADMK or initiatives by AIADMK politicians like himself. As proof, the councilor stated that the JE apparently was very enthusiastic about distributing free TVs (which were provided by the DMK government), but has not shown the same enthusiasm for distributing the free mixers and grinders (which were provided by the AIADMK government). However, the councilor said he shares a great relationship with the sanitary and conservancy inspectors, and the engineers from the city’s water utility; he only has to call them for them to respond in a timely manner to the issues raised.\textsuperscript{26}

\textsuperscript{24} Interview with Respondent 19, February 24 2011
\textsuperscript{25} Interview with Respondent 18, February 24 2011
\textsuperscript{26} Phone conversation with Respondent 35
In such a case, any effort to create an objective list of ward problems and to prioritize problems, such as the one carried out in ward 57, may help to push junior engineers to take action. By providing justifications for action beyond that of personal or party affiliations between councilors and JEts, holistic data about the ward could help push these actors to resolve problems in a systematic manner, and address areas of greatest need first.

However, not all problems facing councilors can be addressed by this kind of effort. Councilors told us that even official ward development funds were sometimes very difficult to access. One councilor complained to us, “They say that they are giving us the 25 lakhs but we have never seen that amount during our tenure.” Because of lack of awareness and the difficulties accessing funds, usage of these funds ranged from a high of 70% to a low of just 41% during the tenure of the last Corporation Council from 2007 to 2011. While data collection could push reluctant junior engineers to take action on ward level problems, it is unclear how such an effort would help to resolve systemic problems like these.

**Case 2: Improving the locations of public toilets**

*Poor planning prevents toilets from being used*

Clearly, there is a great need for more public toilets in Chennai. The 2011 Census shows that only 181,402 out of 315,000 slum households had a latrine within the premises, a little more than half of all slum households. The remaining rely on shared resources or open defecation, the visible evidence of which is everywhere in the city. At a meeting about urban planning needs attended by informal sector workers that we held in 2009, most prominent among their demands was the need for more public toilets in neighborhoods and areas where large numbers of women workers congregated – in market areas, middle class neighborhoods where they worked as domestic help, or in small and tiny industry clusters. Although no public information about toilets is available even now from the city government, our research found that there were only 714 public toilets in the old Chennai Corporation boundaries, and a little more than 900 in the expanded city.

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27 Amounts for ward development funds have increased since the time of this interview to Rs. 30 lakhs.
28 Interview with Respondent 18, February 24, 2011
30 The city boundaries expanded in October of 2011, and the city went from ten to fifteen administrative zones and from 155 to 200 wards.
However, poor planning for toilet locations has meant that even the limited numbers of existing toilets in the city were not being utilized fully. The Transparent Chennai project undertook a mapping and survey of toilets in one zone before the city expanded in 2011. In the field, our volunteer surveyors found that many of the toilets were hardly used, not even by women and children who we expected to be their primary users. For some toilets, this was because they were not well maintained. However, our surveyors also reported that many toilets did not appear to be located in areas where they would be required. This meant that toilets were not near under-served slum areas, or areas of heavy footfall like transport junctions, informal and formal market areas, or even busy streets.

The maps that emerged from this exercise confirmed these reports from the field. Through a Right to Information Act petition, we were able to gain access to a map commissioned by the Tamil Nadu Slum Clearance Board of slums that had come up in the city since 1985. Because these areas lack official recognition as “slums,” residents were not able to easily access individual connections for water and sanitation. As a result, these areas would clearly be areas of great need for public sanitation facilities in the zone. Our map, shown below, found that only some of the toilets were located near such under-served settlements. Instead, the mapping showed clusters of public toilets built in areas without obvious users nearby.

Image 3: Map with arrows pointing to slum areas (blue and purple dots) and toilet clusters (orange dots)
Interviews with Zonal officers illuminated the problem: when budgetary allocations were given to wards and zones to construct toilets, they only included money for the actual physical structure and not for land. As a result, toilet locations were not decided upon on the basis of sanitation needs, but were instead sited wherever the city already owned land. This meant that there were clusters of toilets around existing pieces of municipal infrastructure like zonal offices and ward offices. This kind of poor planning about toilet locations meant that even the limited number of public toilets available in the city were vastly under-utilized.

Our intervention: helping the city to use available information on sanitation needs for planning better for toilet locations

Suddenly, after two decades without any new toilets constructed, in July of 2012, newspapers reported that the Corporation of Chennai was planning to construct 5,000 public toilets in Chennai. These reports included the kind of specific details that seemed to indicate a well-planned intervention: precisely 5,000 toilets were going to be installed; toilets would be pre-fabricated and made of “high density polyethylene and polycarbonate sheets”; they would be “aesthetic”; locations for these toilets were being identified. Within three months, new reports emerged that the proposal had been “tweaked.” The number of planned toilets nose-dived from 5,000 to 2,000, suggesting that the number of toilets was not being determined by considerations of need. They municipality was now considering “stainless steel toilets” as they were “swanky.” While the July reports suggested that locations for the toilets were already being identified, all the locations had still not been decided upon even after three months.

Unfortunately, these efforts to build more toilets were not successful. Two tenders were released in 2012, but the city received no successful bids. The first tender released in August 2012 invited bids for installation of a total of 5,000 pre-fabricated toilets: 2,000 toilets in zones 1 through 7 and 3,000 toilets in zones 8 through 15. Newspapers reported that the number of toilets was reduced to make the project more attractive for the

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private sector. Accordingly, the second tender released in December 2012 reduced the total number of planned toilets to 2,000, and further divided the project into three packages for north, central and south zones in the city with 446, 1024 and 530 toilets, respectively. This tender received three bids, but all bids were from companies that did not meet the technical requirements.

Finally, in September 2013, more than a year after the first announcement, newspapers reported a more sober statistic: the Corporation was now promising to “soon” install 750 toilets. They were also reportedly considering an automated model like the one that had been set up in Trichy, Ooty and Tambaram. According to the latest news report, the Corporation had “finalised the locations for the proposed toilets,” and a new tender would be released shortly.

Through our other interactions with the Joint Commissioner – Public Works, who manages the public toilet infrastructure in the city, he had become aware of our extensive documentation and surveys of public toilets in the city. As a result, we were invited to participate in the city’s internal discussions to improve the planned tender. The basic model that the city proposed was to identify a private provider that could build and maintain pre-fabricated toilets in the city (what are more widely known as ‘Porta Potties’). While the toilets would be free for users, private providers would be able to earn revenue from selling advertising space on the toilets, and could demand additional fees from the city to support maintenance costs.

As we looked at the tender documents, we became increasingly worried that this process would also result in misplaced toilets that would not address the city’s sanitation needs. In discussions, officials at the Corporation were clear that this tender would only be to provide public toilets for transient populations, and not for slum areas – these were to be handled separately at a later time. But in examining the August 2012 tender, we saw that the locations had not been specified at all; instead it stated that “[s]ite locations and 3000 number of modern shell units (toilets) are to be identified by the Corporation of Chennai.” In the December 2012 tender, we found that the city had proposed a list of 820 roads along which the new toilets were to be located – a small improvement over the previous tender. However, some of roads were very long, and the tender included no

specifications except the road name, giving the private toilet company a great deal of leeway in where they could have built the toilet. For instance, in one of the three packages in the second tender, the document listed road names and provided a categorization of the land use along that road that was meant to provide a justification for why the toilet was required: commercial, market, temple, bus depots and termini, hospitals, etc, but no further specifics.39

Within this context, our intervention was geared towards two outcomes: firstly, helping the Corporation utilize the best information available to it about sanitation needs to determine the locations of the new toilets, and secondly, to support the Corporation in structuring the tender to ensure that the private contractor would actually build in these specific locations, and later, to continue to maintain the toilets.

The Joint Commissioner – Public Works had consistently displayed an interest in using data to support decision-making for the city, and wanted to apply the same approach to the revision of the tender for public toilets. We suggested that the city approach the Census department for maps of Census blocks along with information on access to sanitation, but the Census department gave the city blank data sheets in response to their request.

Within the Corporation, our interviews revealed that there was very little agreement on how the list of 820 roads included in the second tender had originated. The Executive Engineer of the Buildings Department, told us that “[t]hey used open defecation as the criteria to identify toilet locations – these roads were identified visually; there was no formal survey process.” He also said that the junior engineers had identified these roads, but interviews with them revealed that the process was not systematic or consistent across the city: for instance, only some of them knew that such a list had been prepared.40 However, what we quickly realized upon further interaction with these engineers was that most of these officials had a near-encyclopedic knowledge of their own wards, and of the infrastructure under their control.

Accordingly, we suggested a means through which the city could systematically use the knowledge of these engineers to plan for sanitation in their wards. Transparent Chennai devised a virtual mapping methodology that would allow these engineers to map the location of existing toilets and identify a feasible and specific location for proposed toilets. JE’s were invited to our office, and used a computer to mark the locations of existing and proposed toilets on the map, along with any comments, such as whether the toilet was slated for demolition, or whether the toilet was in regular use.

The virtual mapping exercise resulted in rich maps that contained the first comprehensive information about toilets available to the Corporation. Because the nature of this exercise meant that they were looking at maps of their wards rather than lists of streets, the Junior Engineers had to consider planning issues they may not have done before: Should an existing toilet slated for demolition be replaced by a new one? Should toilets be strategically placed near the Tamil Nadu State Marketing Corporation’s retail outlets for alcoholic beverages where men commonly gathered to drink after dark? They also had to ensure that the toilets they proposed were a reasonable distance away from the existing toilets.

With these maps as guides, we suggested that the Corporation of Chennai conduct a detailed field survey of each proposed location to assess whether constructing a toilet there was actually feasible. In earlier versions of the Corporation’s plan, the private company was required to ensure that the toilet had running water, and that its waste be safely disposed. The field survey collected data on whether it was possible to connect the toilet to formal water supply and sewer systems provided by the Chennai Metropolitan Water Supply and Sewerage Board (CMWSSB). The field survey also ensured that proposed toilets were not in the way of existing municipal infrastructure like electricity boxes, telephone lines, and that they did not block entrances to apartments or take up too much space on footpaths. The engineers marked 608 proposed locations for the new toilets during the virtual mapping exercise at our offices. After the field verification, out of 608 locations verified, only 348 were found to be feasible.

These locations for toilets have found their way into the tender document and are described by their precise latitudes and longitudes, as opposed to simply road names. The tender has four packages, each grouping zones with approximately the same number of toilets and estimated revenue potential from advertisements. A map with the different packages has also been included.

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in the tender. We also provided research support to the Corporation on performance monitoring contracts, and the Corporation’s latest tender has included strict clauses that monitor private parties, link their payments to their performance, and gauge their performance using data.

**Discussion: Planning without data**

What is clear from our engagement with the city is that the city faces significant constraints on accessing useful information and data for planning, just as residents face data gaps in holding the government accountable. For the toilets tender, typical of the tender processes in the Corporation, the Joint Commissioner –Public Works told us that “there was no data that existed to help us make this decision.” Government departments, like the Census office in this case, also routinely fail to provide information for one another, a phenomenon common to government offices all over the world. Indeed, studies have found that the most frequent users of some “open government” data portals are actually government employees themselves! This lack of data is made worse by the fact that the Corporation, as we were told repeatedly during our engagement with them, works in a “firefighting” mode, where works are undertaken in emergency-like situations with little scope and time for extensive analytical exercises to support planning.

Even information held by the city about its own infrastructure is problematic. Generally, those officials with the power to plan projects are those who sit in Ripon Buildings, the city’s headquarters. But our interviews found that under existing information management processes, these officials do not have access to an accurate or updated picture of conditions in the wards. We found that the Electronic Data Processing (EDP) and GIS departments in the Corporation did not have the data that they were supposed to, such as basic spatial data on the location of roads and existing assets. Moreover, other databases are also problematic. Transparent Chennai’s research on the number of toilets in the city has found that information on toilets and other infrastructure only gets updated

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42 The image shows the location of feasible toilets in the city – locations that were incorporated into the tender document. These locations were divided into packages for private companies to bid for. The map is also available at: [http://cdb.io/17YGkOo](http://cdb.io/17YGkOo)


44 Discussion with Respondent 6, November 18, 2013


46 Interview with Respondent 6, August 1, 2013

47 This is based on our experiences trying to get data from various departments to assist the Works department. Recorded in Meeting notes for Data Collection, July 29th-August 8 2013.
in the central city register once a year, when the city’s assets are updated for preparing the budget.\(^{48}\) However, toilets are demolished, built, and repaired throughout the year. This means that officials at the central city offices usually do not have the most up-to-date information about their own city’s assets.

Another important example is that of complaints. Commissioners and other city leaders only have access to information about complaints that come through the city’s official grievance redressal system, called ‘1913’. But our interviews with councilors and city officials suggest that less than a quarter of complaints go through this system, meaning that the city’s top leadership does not have a good sense of how well infrastructure is being maintained. More frequently, residents simply phone in complaints to councilors or to zonal officers, or complain face-to-face at their offices.\(^{49}\) Ironically, councilors and lower-level bureaucrats that are the most responsive to phone, sms, or in-person complaints will never find that their responsiveness is reflected in the city’s official complaint monitoring system, and will never be recognized for their services.

Indeed, the most up to date information about the ward rests with junior engineers and other field workers. These engineers go on inspections every morning, examine the work of contractors, and are responsible for planning, budgeting and monitoring smaller local projects. As a result of this, they are a repository of practical knowledge. Our researcher wrote this in her notes after visiting a zonal office:

“I went to the ward office in ward [B] with Dhivya. Dhivya had some data that she wanted to cross check with [Respondent 13]. He corrected the data easily – for instance, he recited the material of the road by looking only at a list of roads. Wherever it was not written in the list, he wrote the “cc” for cement concrete, “br” for bituminous roads and “ir” for interior roads against his spiral bound list. He knew where footpaths were being constructed, where they had just been constructed and where they were going to be constructed.”\(^{50}\)

Their knowledge was evident during the mapping exercise as well. We found that the locations of existing toilets the JE’s had mapped in front of a computer during the virtual mapping exercise corresponded almost exactly with the actual locations of toilets taken on a GPS device. Also during the mapping exercise, many JE’s were able to identify from memory the toilets in the area that were “to be demolished,” the number of seats in each toilet, and whether the toilet was being used.

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\(^{48}\) Interview with Respondent 14, Ward office, September 24 2013

\(^{49}\) Interview with Respondent 3, January 30 2013.

\(^{50}\) Notes from field visit, Dhivya Murugaian and Vinaya Padmanabhan, 13 September 2013.
Image 6: Toilets marked from memory

Image 7: Toilets mapped after a physical verification
Even though we could only access a small fraction of their knowledge, the information from the JE’s was able to ensure that toilets were proposed for locations where they were both required and where it was possible to build them and connect them to required infrastructure.

In the absence of data for planning, such as that required for planning for public sanitation needs, other considerations enter into the planning of projects that skew their utility for the public good. Over the 18 months before the newest tender was released, the Corporation changed its views on everything: the number of toilets, their designs, their locations and how they would be constructed and managed. It was evident that some of these changes were influenced not by sanitation needs but by the interests of the private sector: the tender documents had been revised several times because they did not get a satisfactory response from the private sector who - according to media reports and government officials - found the clauses too exacting.\textsuperscript{51} We believe that bringing field workers to inform the planning process, as the city of Chennai did in selecting locations for toilets, can insulate planning from such perversions.

\textsuperscript{51} Meeting notes with Respondent 4, October 2, 2013
However, the methodology we used to incorporate these workers certainly had some drawbacks. For example, our interactions with the junior engineers revealed that the virtual mapping process was not free of political bias. Some engineers refused to map proposed locations without permission from the councilor. Others were constantly on the phone with the councilor during the virtual mapping to check if the locations they were proposing were acceptable to him/her. Yet, by positioning these engineers at the forefront of the planning process, we were able to tap into their wide-ranging knowledge about their wards that filled a gaping vacuum in knowledge about sanitation needs.
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