VISION MUMBAI
Transforming Mumbai into a world-class city
A summary of recommendations

A Bombay First – McKinsey Report
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September 2003

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We neglect our cities at our peril. For, in neglecting them, we neglect the nation.

John F. Kennedy
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Mumbai has historically been India’s commercial capital, contributing significant tax revenues to both Maharashtra and the Centre. However, over the past decade, Mumbai has been declining rapidly on the dimensions of both economic growth and quality of life. Though several very valid recommendations and reports already exist on Mumbai, what is really needed is for Mumbai to undergo a change in mind-set: from thinking of incremental improvement and debottlenecking, it must begin to think of making step jumps towards achieving world-class status. The situation, at present, is such that most policy makers and agencies governing the city refuse to even believe that Mumbai, with its seemingly insurmountable problems, can transform itself into a world-class city in a 10-15 year time frame. This report aims to show the way for Mumbai to do just that.

The report attempts to provide a comprehensive vision for Mumbai for 2013, with the clear aim of helping it achieve the status of a world-class city. It also provides a blueprint for Mumbai’s overall development over the next ten years: what needs to get done to ensure that Mumbai does indeed convert its vision into reality.

McKinsey conducted this study for Bombay First with the active participation of the government institutions that run the city of Mumbai, i.e., the Municipal Corporation of Greater Mumbai (MCGM), the Mumbai Metropolitan Region Development Authority (MMRDA) and the Government of Maharashtra (GoM).

In the course of the study, we conducted interviews with more than 30 key stakeholders of Mumbai; we held more than ten brainstorming workshops with major government institutions, businesses and NGOs; and researched and developed case studies on five international and five domestic city transformations. We also built on the multiple reports already existing on the city. Based on work done by McKinsey in other parts of the world, we developed a framework and database for benchmarking Mumbai with other international cities. Using this framework, we created a calibration for a city’s performance on each parameter – hence, a city’s performance could range from “poor” at
the lowest end of the spectrum, and then move up one notch to “average”, then to “above average” and, finally, “world-class”. We calibrated each notch/rating based on the difference between the city’s performance and international benchmark levels (defined as the average of all the international cities in our sample). So, for example, we defined Mumbai as “world-class” on a particular parameter if the gap between international benchmarks and its performance on that parameter was less than or equal to 10 per cent of the benchmark. Finally, we set the vision and aspirations for each parameter and recommended initiatives to bridge the gap in each.

We would like to add that this report has only been possible because of the good offices of several people. The prospect of putting together a holistic, fact-based plan in a short four month period was daunting to say the least. The tremendous support provided by various institutions – government, corporates and NGOs – was overwhelming and what made this report possible.
Executive summary

To become a vibrant international metropolis, Mumbai must ensure that its economic growth is comparable to world-class levels while simultaneously upgrading the quality of life it provides to its citizens. At present it is slipping up on both dimensions. If it wants to achieve this status, the Government and the citizens need to undergo a change in mind-set rather than continuing to think incrementally. Specifically, Mumbai must invest $40 billion (of which a fourth will come from public sources), over the next ten years, towards effecting this step change. Several cities (e.g., Cleveland, Shanghai) have been eminently successful in achieving this transformation and our analysis suggests that if Mumbai were to follow the eight-pronged programme that is outlined below, it too will be well on its way.

I. Boost economic growth to 8-10 per cent per annum by focusing on services (high- and low-end), developing hinterland-based manufacturing and making Mumbai a consumption centre.

II. Improve and expand mass and private transport infrastructure, including linkages to the hinterland.

III. Dramatically increase low-income housing availability (1.1 million low-income houses) and affordability and drive upgradation of housing stock.

IV. Upgrade safety, air pollution control, water, sanitation, education and healthcare.

V. Create a dedicated “Mumbai Infrastructure Fund” with an annual funding of Rs.1,500 crore and attract debt and private financing.

VI. Make governance more effective, efficient and responsive by corporatising key departments and streamlining important processes such as building approvals.

VII. Generate momentum through more than 20 quick wins to show visible on-the-ground impact during the next 1-2 years.
VIII. Enable implementation through committed public-private resources, led by the Chief Minister and make key government organisations accountable for results.

Mumbai is currently at a critical juncture. It must implement the eight initiatives outlined above, and it must do so now. Otherwise it is in grave danger of collapsing completely.
Cities and their surrounding areas have historically been the drivers of a nation’s growth. A prime example of this is Shanghai, which was the dragonhead of China’s rapid growth in the ’90s. Thriving world-class cities, it has long been observed, need to be strong on two fronts: economic growth and quality of life. Each of these affects the other, leading to a vicious or a virtuous cycle, depending on the situation.

Mumbai, at present, is in reverse gear. It is currently lagging behind on both fronts – economic growth and quality of life (Exhibit 1).

Its recent GDP growth is a surprisingly low 2.4 per cent per annum (1998-2002). And this slow down has undoubtedly affected the growth of Maharashtra, since Mumbai and its surrounding regions contribute over 20 per cent of the state’s GDP. To illustrate, the state’s growth rate fell from 4.8 per cent per annum in 1994-98 to 4.2 per cent in 1998-2002 when Mumbai’s growth rate slipped from 7 to 2.4, a period in which the growth rate of India was as much as 5.6 per cent.

The quality of life in Mumbai has also worsened and the decline is quite steep. Slums have proliferated and congestion, pollution and water problems have skyrocketed. All of this has resulted in a slippage in rankings (Mumbai fell from 26th place in 1996 to 33rd in 2000 in Asiaweek’s rankings of the top 40 cities in Asia). On the international stage, Mumbai ranks a poor 163rd (out of 218 cities world-wide) on the Forbes’ quality of life survey and 124th (out of 130 cities world-wide) on EIU’s hardship ratings. The situation is likely to worsen over the next decade with an expected population increase of over two million.

All this is most unfortunate considering that Mumbai is Maharashtra’s and India’s main economic engine and contributes about Rs. 40,000 crore in taxes to Maharashtra and the Centre annually. Compared to that sum, what Mumbai gets in return from the State and the Centre is a grossly inadequate Rs. 1,000 crore of capital expenditure every year (Exhibit 2). It is quite clear that if Mumbai’s decline continues, it will lead to an irreversible decline in Maharashtra’s fortunes.

Mumbai today: Slipping up on both fronts – economic growth and quality of life
Exhibit 1
MUMBAI LAGS BEHIND ON BOTH FRONTS – ECONOMIC GROWTH AND QUALITY OF LIFE

Low economic growth...

GDP growth estimates*, 1997-98 to 2001-02, CAGR, Per cent

- Mumbai
- Maharashtra
- India
- Shanghai

... and poor quality of life

\[ \text{Transportation} \]

\[ \text{Other infrastructure} \]

- Mass transport
- Private transport
- Housing
- Safety/Environment
- Water/Sanitation
- Education
- Healthcare
- Financing
- Governance

* Based on district-wise NDP estimates for Maharashtra

Source: Department of Economics and Statistics (Government of Maharashtra); team analysis

Exhibit 2
MUMBAI CONTRIBUTES ABOUT RS. 40,000 CRORE ANNUALLY TO THE CENTRE AND THE STATE

Rs. thousand crore p.a.

\[ \text{Central Excise} \]

\[ \text{Income} \]

\[ \text{State} \]

\[ \text{Total} \]

Only 1.3% of revenue generated in Mumbai ploughed back into city

\[ \text{Funds received from Centre and State} \]

0.5 - 1

\[ \text{Taxes transferred to Centre and State} \]

* Includes collections at the international airport and both ports in Mumbai

** Includes only 25% of all corporate taxes collected in Mumbai; assumes 75% collected in Mumbai but generated outside

*** Sales Tax, Stamp Duty, State Excise Tax

Source: Government of India, Government of Maharashtra; Bombay First website; interviews; team analysis
Though several very valid recommendations and reports already exist on Mumbai, what is really needed is for Mumbai to undergo a change in mind-set: from thinking incrementally, it must begin to think of making step jumps. The situation, at present, is such that most people refuse to even believe that Mumbai, with its seemingly insurmountable problems, can transform itself into a world-class metro in a 10-15 year time frame. For many loyal Mumbaikars, transforming Mumbai into a liveable city or even just being able to prevent its complete collapse is in itself a worthy goal. But that constitutes only the first step towards achieving a transformation that will take 10-15 years. And this report attempts to provide a bold blueprint on how Mumbai should set about achieving it.

The next step is to clearly articulate an exciting but realistic ten-year end-state. To do this, we benchmarked Mumbai with ten cities (London, New York, Singapore, Hong Kong, Sao Paolo, Sydney, Shanghai, Bangkok, Rio de Janeiro and Toronto) and developed a ten-year vision for Mumbai.
To become a world-class city, Mumbai needs to make a quantum leap on two fronts: economic growth and quality of life. We have, in this chapter, described both qualitatively and quantitatively what Mumbai will look like in 2013 if it does indeed transform itself.

Mumbai’s vision statement for 2013

Mumbai’s aspiration is to become a world-class city in the next 10-15 years. In order to achieve this, it needs to be distinctive on the dimension of economic growth and above average on quality of life (Exhibit 3). It will, therefore, need to step up economic growth to 8-10 per cent by becoming one of Asia’s leading service hubs, with a fast-growing manufacturing base in the hinterland. On the quality of life dimension, comparing it to the benchmark cities revealed that it needed to move from average to above average on mass transport, from poor to above average on private transport, housing, safety/environment, financing and governance. It will also need to make improvements in the remaining areas, i.e., go from being average to above average in water/sanitation and education and from above average to world-class in healthcare.

Mumbai’s aspirations for 2013

In order to arrive at this end-state, the Government must set certain concrete targets. Keeping this in mind, we have formulated quantitative aspirations for the six core areas that Mumbai must focus on. Exhibits 4-7 provide a complete set of aspirations and form the basis of our recommendations. The six core areas are:

1. Economic growth: To illustrate, real growth needs to jump from the 2.4 per cent that it was between 1997-98 and 2001-02 to 8-10 per cent over the next decade, thus creating more than 0.5 million additional jobs.

2. Transportation: Significant improvement is required in both mass and private transportation. In mass transportation, it is imperative to ensure that the travelling population per rail car is kept down to 220 people and there is at least one bus for every thousand people. At present,
Exhibit 3

“VISION MUMBAI” FOCUSES ON SIX KEY AREAS

- **World-class**
  - Economic growth
  - Mass transport
  - Housing
  - Safety/Environment
  - Water/Sanitation
  - Education
- **Above Average**
  - Private transport
  - Transportation
  - Other infrastructure
- **Average**
  - Health care
- **Poor**
  - Financing
  - Governance

* World-class if within 10% of international benchmark

Source: Team; benchmarking database; Mumbai authorities and publications

Exhibit 4

QUANTITATIVE ASPIRATIONS FOR “VISION MUMBAI”

<table>
<thead>
<tr>
<th>Economic growth</th>
<th>GDP growth rate, CAGR</th>
<th>Formal sector jobs</th>
<th>Job gap</th>
</tr>
</thead>
<tbody>
<tr>
<td>Per cent, per annum</td>
<td>Current Aspiration Benchmark</td>
<td>Current Aspiration Benchmark</td>
<td>Current Aspiration Benchmark</td>
</tr>
<tr>
<td>2.4</td>
<td>8-10</td>
<td>8-10</td>
<td>4-6</td>
</tr>
<tr>
<td>Per cent of total jobs</td>
<td>28</td>
<td>60-70</td>
<td>0-1</td>
</tr>
<tr>
<td>Job gap</td>
<td>0</td>
<td>0</td>
<td></td>
</tr>
</tbody>
</table>

Source: Team; benchmarking database; Mumbai authorities and publications
Exhibit 5

**QUANTITATIVE ASPIRATIONS FOR “VISION MUMBAI”**

### Mass transport

<table>
<thead>
<tr>
<th>Parameter</th>
<th>Current</th>
<th>Aspiration</th>
<th>Benchmark</th>
</tr>
</thead>
<tbody>
<tr>
<td>Rail congestion: Travelling population per rail car</td>
<td>570</td>
<td>220</td>
<td></td>
</tr>
<tr>
<td>Number of buses: Buses per 1,000 people</td>
<td>0.75</td>
<td>0.8-1</td>
<td>1</td>
</tr>
</tbody>
</table>

### Private transport

- **Average speed of travel, airport to CBD** (Kmph)
  - Current: 25
  - Aspiration: 40
  - Benchmark: 40

- **Freeways/Expressways**
  - Number
    - Current: 2
    - Aspiration: 4-8
    - Benchmark: 8

- **Public parking slots**
  - Total public parking slots per 1,000 vehicles
    - Current: 2
    - Aspiration: 40-50
    - Benchmark: 119

### Housing

- **Slum proportion**
  - Per cent of total population
    - Current: 50-60
    - Aspiration: 10-20
    - Benchmark: 4

- **Price of residential flat**
  - Times of annual household income: 6-8
    - Current: 3-4
    - Aspiration: 3-4
    - Benchmark: 3-4

- **Annual residential rent**
  - Per cent of per capita income: 140
    - Current: 50-60
    - Aspiration: 35
    - Benchmark: 35

Source: Team; benchmarking database; Mumbai authorities and publications

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Exhibit 6

**QUANTITATIVE ASPIRATIONS FOR “VISION MUMBAI”**

### Environment and safety

- **Air pollution** (Microgram/m³, unit: 250-1,000)
  - Current: 50-100
  - Aspiration: 100
  - Benchmark: 100

- **Area under green cover** (Acres per 1,000 people)
  - Current: 0.03
  - Aspiration: 3-4
  - Benchmark: 4

- **Crime rate**
  - Total crimes per 1,000 people per year
    - Current: 20
    - Aspiration: 15-20
    - Benchmark: 40

### Water and sanitation

- **Plumbed water availability** (Litres per capita per day)
  - Current: 160
  - Aspiration: 250-300
  - Benchmark: 300

- **Public toilets** (Toilets per million people)
  - Current: 17
  - Aspiration: 45
  - Benchmark: 120

- **Sanitary landfills**
  - Per cent of total solid waste disposed of
    - Current: 10
    - Aspiration: 30-50
    - Benchmark: 75

### Healthcare

- **Healthcare beds**
  - Total public and private beds per 1,000 people
    - Current: 3.3
    - Aspiration: 4.5
    - Benchmark: 4

- **Tertiary healthcare beds**
  - Total tertiary beds per 10,000 people
    - Current: 6.7
    - Aspiration: 7
    - Benchmark: 6

Source: Team; benchmarking database; Mumbai authorities and publications
suburban rail congestion is such that during peak hours there are more than 570 people per rail car in certain sectors. For private transportation, increasing the average speed of travel, tripling the freeways/expressways and increasing the number of public parking spaces by order of magnitude is essential.

3. **Housing:** Here, some of the aspirations include bringing down the number of people living in the slums from the current 50-60 per cent to 10-20 per cent. Mumbai also needs to increase housing affordability by, for instance, bringing down housing rental costs from their current 140 per cent of per capita income to about 50 per cent.

4. **Other infrastructure (safety, environment, water, sanitation, education and healthcare):** Mumbai needs to upgrade its performance in all these areas. For example, despite the healthy statistics on crime, it needs to further improve the law and order environment. Also, it must drastically reduce air pollution from the unsafe 1,000 micrograms per cubic metre (mcm) that it currently is to 50-100 mcm.

5. **Financing:** Here, reaching one of the benchmarks would involve reducing the percentage of administrative expenditure from its current 50 to less than 25, thereby enabling increased fund availability for development and maintenance.

6. **Governance:** An immense improvement is needed in governance. For instance, the time required for the key process of building approvals should be reduced from 90-180 days to less than 45 days.

Setting these quantitative targets will help calibrate the impact of the various initiatives and recommendations along measurable parameters.
Learning from successful city transformations

To understand whether it is possible for Mumbai to achieve Vision Mumbai, we studied the transformations of ten other cities. In this chapter we have showcased the efforts of two international cities – Cleveland and Shanghai – that became world-class. In addition, we have described the partial turnaround of five Indian cities – Bangalore, Hyderabad, Nagpur, Surat and Thane – to highlight learnings specific to the Indian context.

Cleveland: Rust belt to best American city

From a vibrant city with a large manufacturing base, Cleveland became a “deteriorated rust belt” city in the 1970s as manufacturing increasingly shifted overseas. Unemployment was high, the city’s finances were in terrible shape and crime was rising. The city initiated a programme to transform both economic growth and quality of life. Cleveland Tomorrow, a partnership between industry and government, was set up to boost economic growth. It focused on four high impact projects designed to bring jobs into the city, including a for-profit venture capital fund. As a direct result of this, Cleveland’s economy grew 0.5 percentage points faster than the US from 1982-1992 and manufacturing jobs stabilised at around 20 per cent of employment (close to the US average). On the quality of life front, the Mayor formed an Operations Improvement Task Force (OITF) that recommended around 800 initiatives for city development of which three-fourths were implemented. Some of these initiatives included the setting up of three primary healthcare centres, getting the housing authorities to partner with banks for loans and significantly developing the downtown area (e.g., creating the “Rock and Roll Hall of Fame” and transforming the polluted “Flats” warehousing area into a clean waterfront with high-quality infrastructure). Such was the transformation that it came as no surprise when Cleveland won the Best American City award for an unprecedented three times in five years.

Shanghai: Unpainted wreck to world-class city

In 1987, Shanghai was a dimly lit, unpainted financial wreck, at a time when China would soon be
reeling from the international backlash following the bloody Tiananmen crackdown. However, with Zhu Rongji’s term as Mayor from 1987 to 1991, the city witnessed vast renaissance-like improvements. “One-chop Zhu” – the nickname he earned as Mayor of Shanghai for cutting through red tape – led the development and opening up of Pudong (Shanghai’s hinterland). “Infrastructure goes first” was the strategy followed by Pudong since it began its development. It undertook ten major infrastructural projects (including bridges, tunnels, the metro, deep-water port) as a result of which Shanghai grew at 8-10 per cent per annum in the ‘90s and Pudong at between 16 and 18 per cent. Moreover, the $40 billion investment in infrastructure changed the face of Shanghai – entire blocks were rebuilt and its roads, buildings, transport and telecom emerged as the best in the world. In fact, it now has several other infrastructural projects underway, which include an international airport, a subway and a pedestrian passageway across the Huangpu River separating that area from downtown Shanghai.

Hyderabad: Impoverished rural backwater to “Cyberabad”

Hyderabad was suffering from low economic growth and wide income disparities in the early ‘90s. The quality of life in the city was abysmal – the roads were littered with garbage and street lights were in disrepair. Then, Chandrababu Naidu was elected Chief Minister of Andhra Pradesh in 1994. In just five years, he turned an impoverished, rural backwater into India’s new information technology hub. The local government played an important role by increasing tax collections by over 30 per cent thus generating financing to widen over 50 roads, build flyovers and improve street lighting. In addition, the CM actively focused on attracting investment to the state. As a result, Hyderabad has attracted investments from Microsoft to set up its only R&D centre outside of the US and pipped other cities at the post by becoming the chosen location for the Indian School of Business. Although a lot remains to be done in the areas of power and water, the CM has put Hyderabad firmly on a growth track.

Bangalore: Public-private partnership arrests steady decline

By 1999, Bangalore was beginning to show symptoms of decline. A citizen’s report card highlighted the increasing and rapidly spreading dissatisfaction with the city’s services. In response to growing pressure from citizens and corporates alike, SM Krishna, the Chief Minister of Karnataka, created the Bangalore Agenda Task Force (BATF) and asked Nandan Nilekani, the CEO of Infosys, to head it. He also presided over public forums where the heads of the agencies mainly responsible for the city (e.g., Bangalore Development Authority, Bangalore Mahanagara Palike) presented their improvement plans and time lines. Several key initiatives were implemented. For instance, the Bangalore Development Authority (BDA) turned around and became financially self-sufficient by rigorously accounting for all its assets and then selling some while leveraging the others. By doing this, it was able to build 40,000 infrastructural sites in three years as compared to the 3,400 of the previous ten years. Bangalore’s property taxation system was overhauled and made into a self-assessment scheme. The BATF also showcases public-private partnerships at their best. The BATF lent manpower to various projects while raising over Rs.15 crore through corporate donations. The BATF
typically focused on visible high impact projects such as using the citizens’ report card to increase accountability and pressurise the bureaucracy into action; standardising bus shelter designs; synchronising traffic signals and building public toilets. As a result, civic services and amenities got a much needed fillip.

**Surat, Nagpur and Thane: Making the government machinery work**

The smaller Indian cities of Surat, Nagpur and Thane have witnessed major improvements in the quality of life mainly through improved municipal governance. For example, in 1994, Surat was reeling from an attack of the plague and a deluge of floods. The new municipal commissioner appointed zonal officers and mandated heads of municipal divisions to spend half their day on walkabouts monitoring city cleanliness. He also welcomed private sector participation. Consequently, Surat rebuilt itself without any aid from state or national government and became the second cleanest city in India (after Chandigarh). Similarly, Nagpur and Thane were both improved vastly by the efforts of their new municipal commissioner who improved the efficiency of government machinery by setting targets, making senior government officials accountable for results, monitoring daily progress and penalising non-performers. Consequently, both cities today enjoy wider roads, a cleaner environment, fewer slums and more low-income housing.

In all of these city transformations, as well as a host of others that took place in Singapore, London and New York, three things seemed to be of paramount importance: a) A city needs to actively focus on economic growth; b) It must focus on a few high-impact projects with public-private partnerships so that it achieves visible impact ; c) It must have at its helm a committed leader ably supported by a well co-ordinated body of administrators. All these three lessons have been incorporated into the blueprint for Vision Mumbai.
In order to achieve Vision Mumbai, the Government must quickly implement the eight high priority initiatives that have been listed later in this chapter (Exhibit 8). While the first six initiatives lay down high-level solutions to bridge the gap (in both quantitative and qualitative terms) between Mumbai today and where it needs to be by 2013, the last two initiatives are critical to making implementation happen on the ground.

I. Boost economic growth to 8-10 per cent per annum

To become a vibrant, world-class city, Mumbai needs to grow at 8-10 per cent per annum: an increase of 4-5 percentage points over what it achieved in the last four or five years. This will allow it to create over 500,000 additional jobs, thus preventing an increase in unemployment (Exhibit 9). It must therefore focus on four thrust areas: high-end services; low-end services; hinterland-based manufacturing; and its transformation into a consumption centre.

First and foremost, Mumbai must focus on reducing the currently high “cost of doing business” (mainly due to high real estate costs) across all these areas. Over and above that, Mumbai needs to launch a set of specific initiatives that have two themes – creating centres of excellence and offering a set of attractive incentives. We have tried to illustrate these themes through the use of a few examples.

1. Target four high-end services – financial services, healthcare, IT/ITES (IT enabled services) and media/entertainment/telecom: Focusing on these will add 2-3 per cent to Mumbai’s GDP growth and over 2 lakh additional jobs over the next ten years. In the financial services sector, Mumbai is far ahead of the rest of India. However, the State government needs to work with the Centre to ensure Mumbai becomes the “centre of choice” within Asia for all new financial infrastructure (e.g., the debt market, offshore trading). In healthcare, the MCGM should grant public hospitals the autonomy to enter into public-private partnerships and become global centres of excellence in important fields such as cardiac care and
Exhibit 8

LAUNCHING EIGHT HIGH PRIORITY INITIATIVES WILL HELP ACHIEVE “VISION MUMBAI”

1. Boost economic growth to 8-10% per annum
2. Expand mass and private transport infrastructure
3. Dramatically increase housing availability and affordability
4. Upgrade other infrastructure
5. Make governance more effective, efficient and responsive
6. Raise adequate financing
7. Generate momentum through quick wins
8. Enable implementation through committed public-private resources, led by the CM

Exhibit 9

PROMOTING ECONOMIC GROWTH CAN HELP MUMBAI GENERATE MORE THAN THE ADDITIONAL 5 LAKH JOBS NEEDED BY 2013

<table>
<thead>
<tr>
<th>Initiative</th>
<th>Sectors</th>
<th>Potential GDP in 2013</th>
<th>GDP growth rate</th>
<th>Additional jobs created by boosting economic growth</th>
<th>Thousands, Cumulative</th>
</tr>
</thead>
<tbody>
<tr>
<td>High-end services</td>
<td>Financial services</td>
<td>37,461</td>
<td>9</td>
<td>89</td>
<td>807</td>
</tr>
<tr>
<td></td>
<td>Healthcare services</td>
<td>1,955</td>
<td>5</td>
<td>15</td>
<td>77</td>
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<tr>
<td></td>
<td>IT/ITES</td>
<td>13,311</td>
<td>20</td>
<td>73</td>
<td>73</td>
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<tr>
<td></td>
<td>Media/entertainment/ telecon</td>
<td>11,715</td>
<td>13</td>
<td>73</td>
<td>73</td>
</tr>
<tr>
<td>Low-end services</td>
<td>Construction</td>
<td>10,368</td>
<td>15</td>
<td>244</td>
<td>244</td>
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<td></td>
<td>Hotels/tourism/ recreation</td>
<td>6,763</td>
<td>13</td>
<td>46</td>
<td>46</td>
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<td></td>
<td>Retail</td>
<td>27,575</td>
<td>12</td>
<td>263</td>
<td>263</td>
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<tr>
<td>Manufacturing</td>
<td>Manufacturing</td>
<td>20,771</td>
<td>12</td>
<td>204</td>
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</tr>
<tr>
<td></td>
<td>Transportation/ logistics</td>
<td>1,942</td>
<td>10</td>
<td>10</td>
<td>10</td>
</tr>
<tr>
<td>MUMBAI OVERALL*</td>
<td></td>
<td>140,186</td>
<td>10</td>
<td>807</td>
<td>807</td>
</tr>
</tbody>
</table>

* Excludes manufacturing in the hinterlands and transportation/logistics, but includes other sectors

Source: McKinsey Global Institute (2001); Bombay First; Literature search; Interviews; Team analysis
diabetes. To promote media/entertainment, the existing Film City must be upgraded to world-class levels by lowering taxes/duties and by offering tax incentives to promote post-production and animation work. Mumbai must put a strong investor marketing and management process in place so that IT/ITES can regain its historical premier position.

2. **Create jobs in three low-end service sectors – construction, hotels/tourism/recreation and modern format retail:** This initiative could create an additional five lakh jobs over the next ten years and enhance the Mumbai GDP growth rate by 1-2 per cent. To give recreation a fillip, 5-10 diverse attractions should be made world-class. These could include upgrading the museum, the Elephanta Caves, the aquarium, the zoo and the Sanjay Gandhi National Park, setting up a world class multi-purpose indoor stadium and convention centre (e.g., Madison Square Garden), clearing and redeveloping both the western and eastern seafronts with cafes and restaurants and restoring the heritage precinct in the Fort area. Moreover, Mumbai could truly become a “city that never sleeps” if it were to allow shops, restaurants and bars flexible operating hours. For boosting the modern format retail sector, it will be necessary to increase land supply, allow flexibility in operational hours and labour laws while decreasing the number of permissions needed to operate. The Government should zone areas for supermarkets and hypermarkets in large land parcels such as the Mill lands. Another possibility is to promote the creation of large outlet malls on the highways. This will boost the construction and retail industries which are the key drivers of economic growth and employment.

3. **Convert the hinterland into a manufacturing and logistics hub:** The hinterland has a huge potential to expand and bring in an additional investment of $8 billion and over 2 lakh jobs over the next decade. To do this, the Government needs to get three things right: a) Accelerate the announced SEZs by passing the required legislation and creating a package of low cost reliable power, labour reforms and targeted incentives; b) Build infrastructure by deepening the Nhava Sheva port, obtaining approval from the Centre to build an international airport, and creating a trans-harbour link in order to improve connectivity and develop a logistics hub. In the short term, however, the Government should expedite the privatisation of the current Mumbai airport; c) Convert the hinterland shore into a residential, commercial, retail and entertainment complex so that it provides excellent support infrastructure for a large, high-quality talent pool. Further, the Government should actively encourage high value-added, non-polluting manufacturing in the city (e.g., computer assembly, high-end fashion apparel).

4. **Lower tax rates to make Mumbai a consumption centre:** Mumbai has a large demand base and continues to enjoy its position as India’s commercial capital. However, it has not yet fulfilled its potential of becoming India’s and, eventually, Asia’s consumption centre. This is mainly driven by the extremely high cost burden on the end customer compared to other cities in India. Research on various countries (e.g., China) indicates that reducing the tax burden and rates does in fact boost demand as well as tax revenues. Doing so will also place Mumbai in the prime position of being able to attract new manufacturing investments. The
Government, therefore, should move towards reducing or eliminating octroi, reducing sales tax, road tax and stamp duty rates while increasing user charges. This could be done gradually (e.g., to begin with, octroi could give credit to goods exported out of Mumbai, similar to the VAT).

II. Improve and expand mass and private transport infrastructure

While Mumbai may be acknowledged as having one of the more extensive and efficient transport networks within India, its infrastructure is woefully inadequate by world-class standards. It is not hard to conjure up images of traffic snarl-ups in the key arterial roads during peak hours, a desperate hunt for a parking spot and trains with people hanging out from all sides. To substantiate this with numbers: peak hour rail capacity averages more than 500 per rail car on key sectors against an aspiration of 220. When there are more than 350 people per rail car, not only is severe congestion an issue, but even the safety of passengers cannot be guaranteed.

Two key issues constitute the crux of the problem: a) Severe north-south congestion on the western and central railway lines and the key arterial roads (Western Express Highway, SV Road); and b) A lack of east-west connectivity within the city and between the city and the hinterland (Jawaharlal Nehru Port Trust – JNPT, new SEZs).

Several projects are either already underway or being planned to address these two issues. Foremost among these projects is the Mumbai Urban Transport Project (MUTP) aimed at improving the rail and road network. Specifically, this involves adding rail capacity along both the western and central lines (e.g. additional rail lines, converting 9-car rakes to 12-car rakes) and completing two key east-west road links. The project will involve the rehabilitation of almost 20,000 project affected households. Phase I was launched in November 2002 and is expected to finish by 2008. Phase II, involving the further optimisation of the western and central lines, is expected to take another 3-5 years. To improve the road network, the Mumbai Urban Infrastructure Project (MUIP) is being launched. This project will focus on building flyovers/elevened roads, road over bridges (ROBs), subways, bus corridors and new bus terminals/depots on key north-south and east-west links. It will also focus on improving the station areas. All these projects are crucial for the improvement of Mumbai’s transportation network and need to be expedited.

However, even after these initiatives have been implemented, Mumbai will still have a long way to go to reach its aspiration. For example, even after the two phases of MUTP are complete, rail congestion along key routes in the western railway will be significantly higher than aspirational levels (Exhibit 10). Similarly, while MUIP does intend to address the east-west connectivity problem within Greater Mumbai, we also need to initiate efforts to connect the city and the hinterland more effectively.

To truly solve Mumbai’s congestion and connectivity problem, what is needed is: a) Systematically developing 4-5 emerging Central Business Districts (CBDs) – Bandra-Kurla, Andheri-Kurla, Vashi/Belapur and Dronagiri – and improving their connectivity with each other and with key residential areas. This will reduce the current north-south pressure to and from the Nariman Point.
CBD; and b) Providing “end-to-end” north-south and east-west rail and road connectivity in the form of ring rails and ring freeways. All world-class cities have express ring freeways (6-8 lane roads with no signals) around the city such that a freeway can be accessed from any point in the city in less than ten minutes.

Specifically, we recommend that Mumbai put in place four key initiatives – only one of which is currently being completely addressed through MUTP and MUIP – over the next 8-10 years to reach its transport aspiration (Exhibits 11 and 12).

1. **Inner ring rail**: We propose that a Mass Rapid Train System (MRTS) loop between Goregaon, Andheri, Bandra, BKC, Kurla and Ghatkopar be built. This is critical for adding much-needed rail capacity to the key north-south routes and creating east-west rail connectivity between Bandra-Kurla and Andheri-Ghatkopar. It includes plans proposed by the authorities of adding rail lines along some routes (Light Rail Transport System across Andheri-Ghatkopar and a regular rail network between Bandra and Kurla), and is a more comprehensive rail network than the one being currently proposed.

2. **Inner ring freeway**: This will constitute the expressway from Bandra to Worli to Nariman Point meeting up with the East Island Freeway and then going west to Bandra. While individual routes (Bandra-Worli currently being constructed; Worli-Nariman Point proposed; East Island Freeway under MUIP) have already been proposed, the Government must ensure that end-to-end connectivity in the form of an express ring freeway is built as soon as possible. In particular, the east-west components of this proposed ring freeway (e.g., Acharya
Exhibit 11

MUMBAI’S FUTURE TRANSPORT NETWORK OVER NEXT 8-10 YEARS

Source: Team analysis; interviews; workshops

Exhibit 12

COMPREHENSIVE SET OF TRANSPORT INITIATIVES

<table>
<thead>
<tr>
<th>Initiative</th>
<th>Current status</th>
<th>Benefits</th>
</tr>
</thead>
<tbody>
<tr>
<td>Inner ring road</td>
<td>• Some individual links under consideration (Andheri, Charkopar, Bandra)</td>
<td>Low</td>
</tr>
<tr>
<td></td>
<td>but no current plan to provide loop end-to-end connectivity</td>
<td>Medium</td>
</tr>
<tr>
<td></td>
<td>• Western Freeway underway; East Island Freeway to commence under MUP</td>
<td>Low</td>
</tr>
<tr>
<td></td>
<td>• No current plan to provide loop end-to-end connectivity</td>
<td>Medium</td>
</tr>
<tr>
<td>Inner ring freeway</td>
<td>• Environmental clearance for MTHL needed</td>
<td>Low</td>
</tr>
<tr>
<td></td>
<td>• Financing not resolved</td>
<td>Medium</td>
</tr>
<tr>
<td>Mumbai Trans Harbour Rail and Road Link</td>
<td>• MUP and MUTF critical to the optimisation of existing rail and road network</td>
<td>Low</td>
</tr>
<tr>
<td></td>
<td>• MUP to be started immediately -- but awaiting GoI funding</td>
<td>Medium</td>
</tr>
<tr>
<td></td>
<td>• MUTF I financing in place; to be completed by 2008</td>
<td>High</td>
</tr>
</tbody>
</table>

Source: Team analysis; interviews; workshops
Dhonde Marg) need to be built as freeways. If needed, an elevated freeway connecting the highway to South Mumbai could be considered.

3. **MTHL (Mumbai Trans Harbour Rail and Road Link) leading to an outer ring rail and freeway:** This will be the integrated rail and road link connecting Mumbai (Sewri) to the hinterland (Nhava Sheva). The rail link will be connected through the hinterland to the Vashi-Belapur line and back to Kurla creating an outer ring rail. The road link will connect the island city to the hinterland, and then connect up with the Mumbai-Pune expressway that loops back to the Belapur-Vashi expressway and then to Kurla creating an outer ring highway. This connectivity is critical to the development of the hinterland and will convert Mumbai from a north-south axis city to a multi-axis city, and needs to be added to the existing plan under the MUTP/MUIP. This rail and road linkage will also link up with the new world-class airport and the SEZs in the hinterland.

4. **Tactical initiatives to optimise the current rail and road network:**
   - **Optimise rail network:** Add rail lines on the western and central railways and extend 9-car to 12-car trains (already included in MUTP).
   - **Expand the north-south road corridor:** Expand the five key arterial roads into 6-8 lane freeways through a series of flyovers (part of MUIP).
   - **Establish/Strengthen east-west road links:** Establish/Strengthen five key east-west links (currently covered under MUTP and MUIP).
   - **Institute other tactical initiatives:** These include initiating multi-level pay’n’park schemes, introducing dedicated bus lanes on the arterial roads and off-peak-hour pricing on public transport, enforcing adequate parking spaces for residents and guests in all new constructions, road-widening, allowing buses on key flyovers and synchronising traffic signals.

The total cost of the proposed initiatives will be around Rs. 25,000 crore over ten years – above and beyond the expenditure to be incurred on MUTP and MUIP. The costliest components of this are the MTHL road and rail link (~Rs. 8-10,000 crore) and the inner ring rail (~Rs. 8-10,000 crore). Financing options for these initiatives are discussed later.

In the medium term, the city should consider building an underground transport system because it utilises the city’s land assets more effectively. While it is still more expensive than conventional surface or elevated transport infrastructure (e.g., flyovers), the technology has improved dramatically and costs have declined. Moreover, implementing it will cause only a minimal amount of surface disruption. Therefore, the master plan should consider: a) An underground rail metro; and b) Underground roads in the crowded Nariman Point, Pedder Road and Worli areas.

**III. Dramatically increase housing availability and affordability**

Mumbai’s real estate problems are both immense and complex. The problems encompass both sides
of the income spectrum. At the lower end of the spectrum, there is a huge shortfall of affordable housing – 50-60 per cent of Mumbai’s population lives in slums – reflecting the high price of housing in the city. At the higher end, residential and commercial real estate is extremely expensive, yet lacking in quality (dilapidated buildings, lack of green spaces and parking facilities, inadequate infrastructure). As one MD put it, “In Mumbai, you pay first world prices for third world amenities and services.” In addition, the rental housing market is both illiquid and unaffordable. Rental housing (as a percentage of total housing) is 5-10 per cent as compared to international benchmarks of 40-50 per cent.

For it to become a world-class city, Mumbai must ensure that housing becomes more affordable, the rental housing market is resuscitated, land is developed in an integrated manner and the city housing stock is upgraded. Specifically, the percentage of the population living in slums must fall to 10-20 per cent, housing prices should be no more than 3-4 times the annual household income, and the percentage of rental housing (to total housing) should be 30-40. In addition, Mumbai should start creating islands of excellence in world-class housing and commercial complexes, as well as upgrading its housing stock.

To achieve this aspiration, Mumbai must create 1.1 million low-income houses over the next decade (0.8 million to rehabilitate existing slum dwellers and 0.3 million to house the population increase and migration of the low-income segment). Furthermore, we should define the pricing and affordability carefully. The average monthly household income for the bottom 30 per cent of Mumbai’s population is Rs. 6,000 or less and, for this segment, affordable housing should mean spending no more than Rs. 750-1,500 per month on rental housing, or purchasing houses at a price below Rs. 1.5 lakh at current prices.

The current Slum Rehabilitation Authority (SRA) initiatives will create a supply of less than 150,000 units over the next ten years, leaving a huge shortfall of 950,000 low-income housing units over the next decade, which will result in a further increase in slums. For Mumbai to achieve its aspiration it is, therefore, imperative that the Government undertake five initiatives:

1. **Increase land availability by 50-70 per cent:** A comprehensive list has been created which increases land utilisation and reduces the cost of transaction of land *(Exhibit 13)*. While great hopes have been pinned on Mill lands and Port Trust lands becoming available, they will increase land availability by less than 1 per cent. What is needed for Mumbai, then, are some bold initiatives which will guarantee tangible results: a) Increase FSI (Floor Space Index) to an average of 3-4 in as many zones as possible (given that developed parts of international cities generally have an FSI of over 10), linking it to a redevelopment programme. This will add close to 30-40 per cent more land. To prevent overburdening the current infrastructure, amalgamate several contiguous pieces of land so that roads can be widened and more parking spaces created while simultaneously providing a higher FSI to serve as incentive to existing tenants; b) Build the trans-harbour link from Sewri to Nhava Sheva to create around 15-20 per cent additional land; c) Work with the Centre to relax CRZ II and III for Mumbai, given the land scarcity while, at the same time, ensuring that any impact on the environment is minimised. This too will lead to an effective increase in land supply by as much as 15-20
per cent; and d) Reduce transaction cost and increase liquidity by reducing stamp duty to a maximum rate of 2-3 per cent from today’s effective rate of 7-8 per cent. Also, rescind the Urban Land Ceiling Act (ULCA) which today results in unclear land titles, and effectively phase out the Rent Control Act; e) Reduce the average time taken to obtain a building approval from between 90 and 180 days to 45 days. This will also reduce transaction costs (by around 5-10 per cent according to some estimates).

2. Create 800,000 low-income houses to rehabilitate existing slum-dwellers by redesigning the Slum Rehabilitation Authority (SRA) process: It is commercially unviable to rehabilitate almost 60 per cent of existing slum land because of current market prices, the incentive ratios provided under the SRA and the generosity of the current scheme (with its promise of “free housing”). Therefore, the SRA scheme, as it is currently designed, is likely to be unsuccessful.

Hence, what we propose is that the Government reform the SRA process such that slum dwellers get free land, but contribute partially towards the cost of construction. Under this scheme, they will be asked to pay either a lump-sum or Rs. 750-1,500 per month towards their constructed homes as a “user charge”. To facilitate this payment, they will be given secure land tenure/apartment ownership rights once their redevelopment has been approved to use as collateral for obtaining housing loans from private/public sources. Moving to a limited user charge model will make rehabilitation of all slum areas economically viable – thus jump-starting slum rehabilitation. It will also reduce the incentive for new slum dwellers to

### Exhibit 13

**COMPREHENSIVE SET OF LEVERS TO INCREASE LAND SUPPLY**

<table>
<thead>
<tr>
<th>Levers</th>
<th>Increase in land supply</th>
</tr>
</thead>
<tbody>
<tr>
<td>FSI increase</td>
<td>30-40</td>
</tr>
<tr>
<td>MTHL rail-cum-road link</td>
<td>15-20</td>
</tr>
<tr>
<td>CRZ II and III relaxation</td>
<td>15-20</td>
</tr>
<tr>
<td>ULCA/rent control</td>
<td>6-10</td>
</tr>
<tr>
<td>Salt Pan lands</td>
<td>1</td>
</tr>
<tr>
<td>NDZ</td>
<td>1</td>
</tr>
<tr>
<td>Port Trust lands</td>
<td>0.5</td>
</tr>
<tr>
<td>NTC Mill lands</td>
<td>0.5</td>
</tr>
<tr>
<td>Total</td>
<td>50-70**</td>
</tr>
</tbody>
</table>

* 437 sq. km
** Net of overlap

Source: Literature search; interviews; case studies; Bombay First
It is important that these new houses also become subject to the normal user charges (e.g., property tax, water) as applicable.

Finally, the cut-off date for acceptance for the SRA should be maintained as 1 January 1995 and no new slums should be allowed.

In addition to the fundamental reforms of user charges and land tenure/apartment ownership rights, three other changes are required to speed up SRA:

- **Adhere to strict targets and timelines**: It is imperative that the SRA, slum-dwellers and developers speed up implementation and all parties are made accountable for their actions. Areawise targets for conversion should be set and adhered to so that rehabilitation is completed within the ten-year time frame.

- **Move to market-based auctions to choose the developer**: Keeping in line with the areawise targets, multiple developers/NGOs/communities should be invited to propose their plans to the slum dwellers in the area. The plan that gets the most backers should be chosen, rather than continuing with 70 per cent approval of slum dwellers for one developer in an indeterminate timeframe. This will increase transparency, ensure tight adherence to a timeline, maintain democratic principles and ensure that all leading developers participate. This will also enable all interested parties (developers, NGOs, communities) to bid in a transparent manner; and will allow FSI/TDR (Transferable Development Rights) to be set at the lowest level needed to make the project viable.

- **Optimise the SRA approval process**: This can be achieved by instituting a true single-window, two-step Annexure II approval process, putting approvals on the Internet, etc.

3. **Build 300,000 additional low-income housing units by creating “Special Housing Zones” (SHZs) through targeted incentives**: As indicated earlier, to avoid the development of new slums, the Government should develop 300,000 low-income homes with rents of Rs. 750-1,500 per month. Dozens of cities around the world (e.g., New York, Beijing and Shanghai) have spurred on the development of low-income rental housing by providing a variety of incentives to developers. These include special housing zones (e.g., in China, where the government auctions public land on the condition that a certain fraction of it be developed into low-income housing); and tax breaks (such as reduced corporate, property, stamp duties and developmental charges) for developers who construct low-income housing (e.g., the US). Similarly, Mumbai needs to earmark land for Special Housing Zones (e.g., Salt Pan lands at Kanjur) and provide the right package of incentives to developers for low-income housing.

4. **Create islands of excellence through integrated development**: Mumbai has the opportunity to create true “islands of housing and commercial excellence” in areas such as the Mill lands, the Port Trust lands and the Bandra Kurla Complex. These are relatively large tracts of land in prime urban areas. If they are redeveloped holistically to include high-class housing with earthquake resistance buildings, enough open spaces, 40-feet wide roads,
excellent transport connectivity, urban plazas, hospitals, museums and retail developments on the waterfront, they can provide a model for the rest of the city. These world-class “islands of excellence” will begin to attract both corporate investment and talent for high-end services.

5. **Redevelop the city block-by-block:** Eventually, as in most world-class cities such as Hong Kong and Manhattan, Mumbai city should be redeveloped in 8-10 phases in order to give it a fresh, new look and improve building infrastructure (e.g., according to some estimates, Manhattan was rebuilt in 8-10 phases in the last 100 years). What this means is that entire city blocks will have to be demolished and rebuilt with modern infrastructure: earthquake resistant buildings, wide roads, correct infrastructure and open areas for gardens. To encourage this type of redevelopment, the State Government should put together a package of incentives that include FSI increases, exemption on stamp duties, etc. Of course, certain areas like the heritage buildings will need to be excluded from the redevelopment process.

**IV. Upgrade other infrastructure**

Although other infrastructure in the city is relatively better than its transportation and housing infrastructure, the Government needs to further strengthen six areas if Mumbai is to become world-class. We have laid down the key improvements needed in each of these: safety, air pollution, water, sanitation, education and healthcare.

1. **Create a safer law and order environment:** Although crime rates in Mumbai are comparable with other world-class cities, recent sporadic events have led to some unease among its citizens. Hence, the police force needs to launch a slew of tactical initiatives to reduce crime still further and pacify the public. It could for instance better train the police force in riot management and law enforcement, increase beat patrolling and improve its intelligence gathering mechanisms.

2. **Reduce air pollution:** Various agencies will need to play their parts in reducing the dangerously high levels of air pollution currently prevailing to the relatively safer levels of 50-100 microgram/cubic metre. The two principles that should be used are: a) Improving fuel quality by reducing adulteration in both the retail and the user levels, reducing the sulphur content and further increasing provision of CNG/LPG; and b) Phasing out older vehicles by moving to world-class pollution norms for all vehicles.

3. **Increase the availability and reduce the contamination of water:** The MCGM will need to spend Rs. 7,500 crore over the next ten years to improve the water supply and distribution infrastructure. While the currently planned projects such as the Middle Vaitarna (awaiting environmental clearance from the Centre) and the Bhatasa dam will substantially increase the amount of water being brought into the city, the MCGM will still have to spend Rs. 5,000 crore (part of the Rs. 7,500 crore mentioned earlier) on relaying the pipelines to reduce leakages and prevent contamination. In addition, bringing down Unaccounted For Water (UFW) from the current 30-35 per cent levels to 15-20 per cent will increase the additional water supply to match the Middle Vaitarna project. Finally, the corporatisation of the water department will promote greater efficiency, better budget utilisation and an improvement in services.
4. **Create more viable options for the disposing of solid waste:** Today, Mumbai’s landfills are bursting at the seams. Not only is there a dire shortage of sanitary landfills, the large open landfill in Deonar (where 70 per cent of the solid waste is disposed of) is fast reaching saturation point. The MCGM, therefore, must go into overdrive on two fronts: a) Reduce the further generation of garbage by instituting “zero-garbage” campaigns; and b) Create viable alternative landfill sites.

5. **Upgrade access to and quality of education:** Education in Mumbai can be improved by launching three initiatives: a) Expediting the release of land for the setting up of 5-10 high-quality private schools (e.g., increasing incentive ratios for amenity TDRs) to reduce one of the key complaints of executives relocating to the city; b) Promoting the adoption of the city’s municipal schools by NGOs and communities to reduce drop out rates (e.g., Karnataka, Vietnam); and c) Stepping up both quality and quantity of vocational training, especially around the new areas of retail, recreation and ITES.

6. **Improve healthcare services:** The public healthcare system falls woefully short when it comes to issues of quality and responsiveness of service. A large part of this is explained by the considerable over-burdening of the 20 or more municipal hospitals. At the same time, utilisation of primary healthcare facilities (i.e., around 150 municipal out-patient dispensaries and maternity homes) is abysmal. To correct this imbalance, the MCGM needs to upgrade primary healthcare facilities (e.g., ensure that an adequate stock of medicines is available, as are anaesthetists) while discouraging patients from going directly to the municipal hospitals (e.g., by significantly increasing the difference in case-paper fees between municipal hospitals and primary healthcare facilities). In addition, the Government should encourage public-private partnerships in hospitals and should hand over a few hospitals to reputed trusts and NGOs, without withdrawing any funding and by putting in place more appropriate user charges.

V. **Raise adequate financing**

The question asked most often by sceptics is not what needs to be done for Mumbai, but how the huge investment will be funded. Our high-level estimates indicate that Mumbai’s economy has the ability to both find and raise the necessary funding.

We estimate that a total public and private sector investment of Rs. 200,000 crore ($40 billion) will be required over the next ten years (Exhibit 14). However, of this, only Rs. 50,000 crore (i.e., around Rs. 5,000 crore per year) will need to be public investment, spent primarily on transport and housing. The good news is that the Government will need to put in only around Rs. 1,500 crore per year or Rs. 15,000 crore over the next ten years to finance the Rs. 50,000 crore, the rest coming from long-term loans that can be financed based on user charges and increased tax collections. We estimate that this Rs. 1,500 crore per year contributed by the tax-payers will attract private investments in housing, power, telecom and other key economic growth sectors such as manufacturing and services to the tune of Rs. 150,000 crore over the next ten years, thus giving a 1:10 multiple.
While these numbers may look large, we must remember that this investment will need to be made over a ten-year period. Moreover, what is heartening to note is that Mumbai’s economy is more than capable of supporting such expenditure. Remember, it already contributes about Rs. 40,000 crore to the State and Centre annually and Rs. 7,000 crore to the local government. Shanghai’s infrastructure cost the local and central governments as much as $40 billion (Rs. 200,000 crore) over the last decade.

Although Mumbai’s economy is capable of funding this expenditure, it is important that the money is “ring-fenced” in an exclusive Mumbai Infrastructure Fund (MIF). This will be similar to what the National Highway Development Programme (NHDP) did on getting a dedicated annuity of Rs. 4-6,000 crore every year from their Re.1 cess on petrol and diesel and funding a Rs. 60,000 crore national highway programme with it.

The Government has a variety of sources at its disposal, which are more than adequate to generate the required Rs.1,500 crore annuity stream for the Mumbai Infrastructure Fund. They are largely driven off increased spend efficiency and better collecton, rather than tax rate increases. These sources can be grouped into three streams (Exhibit 15):

1. **Increase in user charges and collection efficiency**: This stream can generate about Rs. 1,000 crore per annum. Of this, the increase in property tax collections could be a major revenue-earner. We must remember that property taxes are the main source of infrastructure funding in most cities. The municipal corporations of Hyderabad and Bangalore have made similar changes and in some cases doubled their property tax collections. Other ways of
adding to this kitty are increasing water user charges for the richer neighbourhoods (which currently do not cover the cost of production); directing the current cess on fuel to the MIF (similar to the way the Golden Quadrilateral Project has been funded); and increasing stamp duty collections (due to lower rates). The user charges will also aid the repayment of loans/grants.

2. **Improvement in the MCGM’s own efficiency:** This lever can generate around Rs. 600 crore per annum through better contracting procedures and reduction in administrative expenditure (e.g., privatisation and putting a freeze on hiring).

3. **Better utilisation of Government land assets in and around Mumbai:** This can generate another Rs. 200-500 crore per annum from the sale of developed land and from converting the Government’s leasehold properties to freehold.

On a longer-term basis, the Government needs to rebalance the financing sources for Mumbai such that they are dependant less on stamp duty and octroi and more on income from property taxes, user charges and an escrowed share of the State’s sales tax collections. This is in line with what most major cities follow and will enable the increase of economic activity and promote efficiency.

**VI. Make governance more effective, efficient and responsive**

A huge improvement is needed in all aspects of governance in Mumbai. In a recent study of several governments around the world, McKinsey distilled the principles of high-impact governance. Based
on these principles, Mumbai will need to focus on three main areas:

1. **Create the right structure**: The government should corporatise those departments which need to be completely integrated across the city and have economy of scale of investment, e.g., water, roads (including maintenance), while decentralising those functions best conducted at the ward level (trees, encroachment, etc.). Certain important functions should be consolidated. For example, to improve coordination and accountability in the long term, Mumbai should consider creating a single transportation agency by combining MCGM (roads department), MRVC and the Mumbai-related transportation functions of the PWD, MMRDA and MSRDC.

2. **Make the concerned agencies accountable by instituting target setting, MoUs and monitoring processes**: All government agencies need to set targets for output and outcome (e.g., the water department could have an output target of reducing leakage from the current 30-35 per cent to 15-20 per cent in three years). All key departments and agencies (e.g., MCGM, MMRDA, CIDCO, MSRDC, Mumbai Police) should then sign annual MoUs based on these targets with the Empowered Committee (as suggested later). The Government should exercise tight result-oriented control over these departments (i.e., close monitoring of budgets and performance against targets) but should allow operational autonomy for implementation (recruiting, contracting, budget allocation, etc.). The Government should make these MoUs public for transparency and for creating electoral pressure. The career progression of the agency heads should be directly linked with their ability to perform and meet targets. Finally, the CM and citizen representatives should review the targets at least four times a year. The same process can be cascaded down to the other officers in each of the agencies. In MCGM, for instance, it would be cascaded from the Additional Municipal Commissioners to the ward officers. There would need to be a monthly meeting between the ward officers and citizens where progress against key output indicators is tracked. A public report card should also be created (detailed in the quick wins section).

3. **Streamline key processes**: The government will need to ensure that some key governance processes are streamlined so that unnecessary hassles and costs are reduced. These include:

- **Redesigning the building approval process**: The average time taken for this process can be reduced from between 90 and 180 days to 45 days by first creating a “green channel”. This channel will allow almost 50 per cent of the applications to get automatically approved by an architect. The Government must appoint a select panel of architects who are empowered to approve/certify applications for the building process; it must also increase the transparency of earlier concessions granted, e.g., by updating the latest changes on the Internet and publishing booklets about it. For the remaining applications, the existing system should be redesigned by making as many approvals automatic as possible and ensuring that the fewest possible number of signatures is required.
Using IT interventions at all levels of Government interaction: All processes involving the interaction of the Government with various stakeholders (e.g., with citizens, investors, State, Centre and local government officials) can be computerised for increased efficiency. To illustrate, Hyderabad has more than 20 e-seva kendras that act as “one-stop online shops” for over 30 citizen-facing and business-facing services.

VII. Generate momentum through quick wins

Frankly, Mumbaikars have now grown sick and tired of slogans and reports. What is needed is focused, “on the ground” implementation and results that will be visible in as short a time period as 1-2 years. So, although the detailed planning and implementation of the six major initiatives described earlier will continue, Mumbai should show results with more than 20 quick-wins (Exhibit 16).

Mumbai-based corporates and CEOs should actively fund many of these initiatives, six of which are described here.

1. Beautify and decongest five north-south and five east-west corridors: These roads include the five north-south corridors (Western Express Highway and Senapati Bapat/Tulsi Pipe Road; SV Road and Cadell/Dr. Anne Besant Road; D’Mello/Mumbai Port Trust Road; Eastern Express Highway and Ambedkar Road; and Marine Drive to Peddar Road) and the five east-west connectors that are part of the MUTP/MUIP (including the Andheri-Ghatkopar Link Road; Goregaon-Mulund Link Road; Jogeshwari-Vikhroli Link Road; Santa Cruz-Chembur Link Road; the airport road from Sahar International Airport to the Western Express

Exhibit 16

TARGETED SET OF 23 QUICK WINS TO CREATE MOMENTUM

<table>
<thead>
<tr>
<th>Economic growth</th>
<th>Transport</th>
<th>Housing</th>
<th>Other infrastructure</th>
<th>Financing</th>
<th>Governance</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Improve airport ambience and immigration clearance</td>
<td>2. Set up 2-3 healthcare “centres of excellence” through public-private partnership</td>
<td>3. Set up modern format retail park through public-private partnership and sick-start SEZs in the hinterlands</td>
<td>4. Upgrade current zoo, aquarium, waterfront to world-class levels to boost tourism</td>
<td>5. Convert Bandra-Kurla into a world-class commercial district (i.e., restaurants, cafes, international building standards)</td>
<td>6. Set up a world-class multi-purpose indoor stadium and convention center</td>
</tr>
<tr>
<td>7. Beautify and decongest five north-south and five east-west corridors to raise them to international standards</td>
<td>8. Beauty all landing places (including removing airport slums and railway encroachments, standardising bus shelters and creating bus bays where possible)</td>
<td>9. Promote higher utilisation of Wadala truck terminal by providing adequate financial incentives</td>
<td>10. Rehabilitate all the 35,000 slum encroachments from all roads in Mumbai to Kanjur/Vsodita, consequently widen all the roads and create pavements</td>
<td>11. Implement at least one world-class housing project as part of the re-development of the Mittal lands</td>
<td>12. Build an additional 300 public toilets through private participation</td>
</tr>
<tr>
<td>13. Promote NGO and corporate sponsorship to clean, restore and maintain 325 open/green spaces</td>
<td>14. Facilitate the setting up of 5-10 new private schools and community/NGO adoption of 10 municipal schools</td>
<td>15. Launch an investment campaign run by a special agency created to attract targeted sets of investors</td>
<td>16. Plot “Clean Mumbai” campaign in 3-4 wards by implementing a comprehensive set of Initiatives (including privatisation of SWM)</td>
<td>17. Increase training for the police force in riot management and law enforcement activities</td>
<td>18. Levy property tax on market value along with self-assessment option</td>
</tr>
<tr>
<td>19. Substantially redesign MCGM’s purchasing/contracting procedures to save Rs. 300 crore p.a.</td>
<td>20. Start Integrated “Mumbai Infrastructure Fund”</td>
<td>21. Institute report card system for all wards in MCGM, potentially outsource complaints cell and establish one “Task Force” for each of the 26 wards to review report cards on a monthly basis</td>
<td>22. Launch an “approval drive” to dispose of all building approvals in the pipeline over last one year, and provide all pending water, telephone and gas connections</td>
<td>23. Set up 10-20 e-seva kendras to provide “one stop non-stop” services to citizens</td>
<td></td>
</tr>
</tbody>
</table>

Source: Interviews; workshops; team analysis
The basic concept is centred on making these the “model roads” of the city. For example, the Hyderabad Municipal Corporation widened over 50 of the city’s roads by aggressively offering incentives. While the MUIP is already planning to widen and debottleneck most of these roads, this initiative will aim to ensure that all the required infrastructure (e.g., signages, street lighting, pavements and manholes) and maintenance/cleanliness are as per international standards (e.g., through privatisation of solid waste management services). Incentives should also be offered for beautifying/redeveloping buildings along these roads (e.g., property tax concessions) and creating adequate parking capacity.

2. **Institute a report card system for all wards in MCGM:** This will be based on output indicators, include most of the government departments in its purview and be reviewed monthly by each of the 26 wards’ citizen’s “task forces” (consisting of reputable citizen representatives specifically for this purpose). This will also get translated into a quarterly ranking of all the ward officers and corporators, with adequate publicity through hoardings and newspapers. The complaints/grievances cell should be outsourced to improve the effectiveness and objectivity of the system.

3. **Improve airport ambience and emigration/immigration clearance:** This initiative will address the three airport problem areas of long emigration/immigration waiting time, poor waiting environment and unpleasant counter experience. The Government will need to make several changes on these three fronts, including adding more officers to those manning the counters.

4. **Build an additional 300 public toilets through private participation:** The Government should offer private players enough land as incentive for them to set up public toilets under the pay’n’use scheme. An example of this is Bangalore where 100 public toilets were built with private donations.

5. **Promote NGO and corporate sponsorship to clear, restore and maintain 325 open/green spaces:** Private players and NGOs should be encouraged to adopt parks and given the freedom to conduct operational activities on a daily basis (including maintenance, tree planting, creating a joggers’ track, collecting entry fees). However, the Government needs to specify the minimum infrastructure to be provided, the restriction on construction within the park and the cap on the fees charged.

6. **Levy property tax on market value along with a self-assessment option:** As discussed earlier, the MCGM should push ahead with modifying the current system of property taxes. This will not only rectify imbalances in the current system, but also generate additional revenues. For example, South Mumbai’s property tax rate is estimated to be a meagre 0.002 per cent of capital value, compared to international benchmarks of 1-2 per cent.
VIII. Enable implementation through committed public-private resources, led by the Chief Minister

There are three basic principles that must be followed while organising for implementation:

1. **Create a single co-ordination body:** Today, Mumbai is governed by over ten different agencies (Exhibit 17). There is no single organisation or body really accountable for all of Mumbai. An “MD” of Mumbai is really needed. To illustrate, several cities in the US have elected mayors who have all the city’s functions under their control, including the police. Several city transformations have been led by mayors, e.g., “One-chop Zhu” Rongji in Shanghai, Rudolph Guiliani in New York. For Mumbai, this will probably mean creating a Minister for Mumbai as well as a separate department. But, more importantly, so that this does not become another bureaucratic hurdle with further delays and transaction costs, the key functions such as urban development and housing should be carved out of the respective departments and consolidated under the aegis of the Minister for Mumbai. In addition, key Mumbai agencies such as MMRDA, MCGM, CIDCO should report to this ministry.

However, in the current political environment, this will probably take time. In the short term, therefore, the Chief Minister should play the role of Minister for Mumbai, leading a Steering Committee (Exhibit 18) consisting of key ministers and the Mayor. In addition, similar to Bangalore, the CM should appoint a respected private sector MD as co-chair of the Steering Committee, giving him full authority to review the progress of the various initiatives. To ensure that implementation happens, the CM should appoint an Empowered Committee of key state...
and city government officials and select private-sector participants, chaired by the Chief Secretary. In addition, a full-time Special Secretary for Mumbai should be appointed in the CM’s office for a 3-5 year term to coordinate across all the initiatives. The Special Secretary will be the Member Secretary and the Convenor of the Empowered Committee. The Empowered Committee should review progress fortnightly and have monthly meetings with the Steering Committee. Task forces for key initiatives should be created and should report to the Empowered Committee with clear deliverables and timelines.

2. **Make key agencies accountable for results**: Key agencies like the MCGM, MMRDA, MSRDC, SRA, MHADA and BEST need to be made accountable for results. Accordingly, each agency will need to sign output and outcome based MoUs with the Empowered Committee. These MoUs should be made public, and the CM should review performance on a monthly basis. This approach, if adopted, will be similar to the Bangalore Agenda Task Force (BATF) model adopted by the CM of Karnataka.

3. **Encourage active corporate and NGO participation**: In addition to all the government agencies, Mumbai’s corporates and NGOs will need to play an active role in taking Vision Mumbai forward. To begin with, we recommend that 2-3 Corporate CEOs and heads of NGOs be appointed to the Empowered Committee. We also recommend private sector participation in five areas: advocacy, funding, infrastructure creation, management resources and independent projects (Exhibit 19).
All this together will ensure that Mumbai has taken its first steps towards becoming a world-class city. More importantly, this will help harness the energies of all the key stakeholders in Mumbai.

* * *

Mumbai is a jewel in the crown of not only Maharashtra but also India. The jewel has, however, completely lost its lustre. The eight initiatives, if implemented, will restore that lustre.

The Maharashtra Government must act now. We urge the Chief Minister to start the process by forming the Steering Committee and the Empowered Committee and start implementation in the next 2 months. The state of Maharashtra and, indeed, all of India cannot afford otherwise.

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Exhibit 19

PRIVATE SECTOR PARTICIPATION NEEDED IN FIVE AREAS

<table>
<thead>
<tr>
<th>Potential initiatives</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Advocacy</strong></td>
</tr>
<tr>
<td>• Seminars on topical Mumbai-related issues</td>
</tr>
<tr>
<td>• Reports on solutions to Mumbai’s issues</td>
</tr>
<tr>
<td>• Press conferences to spread awareness</td>
</tr>
<tr>
<td><strong>Funding</strong></td>
</tr>
<tr>
<td>• Advertisements (bus shelters, public toilets, roads, street lights)</td>
</tr>
<tr>
<td>• Donations/sponsorships for key projects</td>
</tr>
<tr>
<td><strong>Infrastructure creation</strong></td>
</tr>
<tr>
<td>• Viable business models for</td>
</tr>
<tr>
<td>– Roads</td>
</tr>
<tr>
<td>– Parks and gardens</td>
</tr>
<tr>
<td>– Public toilets</td>
</tr>
<tr>
<td>– Slum rehabilitation</td>
</tr>
<tr>
<td><strong>Management resources</strong></td>
</tr>
<tr>
<td>• High-calibre management talent on secondment to Government/non-profit agencies</td>
</tr>
<tr>
<td>• Task forces for specific business-related initiatives (e.g., land issues)</td>
</tr>
<tr>
<td><strong>Independent projects</strong></td>
</tr>
<tr>
<td>• Venture capital funding</td>
</tr>
<tr>
<td>• Image marketing for Mumbai</td>
</tr>
</tbody>
</table>

Source: Team analysis; interviews

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VISION MUMBAI
Transforming Mumbai into a world-class city
A summary of recommendations

A Bombay First – McKinsey Report