



STATEMENT

Ajoy Mehta

MUNICIPAL COMMISSIONER

While presenting the Budget Estimates 'A' (fund Code - 11, 12, 60, 70) 'B' (Fund Code - 21, 22, 23) & 'G' (Fund Code - 40) For 2016 - 2017 to the Standing Committee on Wednesday, the 3rd February 2016.

2016-17

Mr. Chairman,

I am presenting to the Standing Committee, the estimates of receipt and income and expenditure pertaining to the Budgets 'A' (Fund Code 11, 12, 60, 70), 'B' (Fund Code 21, 22, 23) and 'G' (Fund Code 40) for the financial year 2016-17 in pursuance of Sections 125 and 126E of the MMC Act, 1888. I have been closely associated with the MCGM as Jt. Municipal Commissioner during my earlier tenure from September, 1998 to April, 2000. I have taken over as Municipal Commissioner of this august organization and I, therefore, deem it my privilege and honour to present the Budget Estimates of Brihanmumbai Mahanagarpalika as the Municipal Commissioner.

Citizen centric administration and observance of budgetary/financial discipline

On taking over the charge as a Municipal Commissioner of the country's largest civic Corporation, I felt the need to give a responsive, effective and transparent administration that meets the expectations of the citizens. As we globalize and become an important and key player in the world, we need to prepare Mumbai to step up and lead the commercial and financial growth of the country. Towards this end, not only do we have to ensure quality, reliable and robust civic

infrastructure, but also ensure that every citizen has access to a quality of life that enhances his potential to deliver his best.

Keeping the above twin goals in mind, we have decided to strengthen the ward level administration to ensure that citizen centric civic services are delivered effectively. For this, it is important to strengthen and make wards the instruments of service delivery. I have started the practice of Assistant Commissioner review meeting every first Saturday of the month to not only improve co-ordination between ward level and central administration, but also to take stock of the responsiveness and level of service delivery at the cutting edge. This is showing results in better quality civic services, curbing menace of illegal encroachment of footpaths and more synchronised efforts to ensure that the needed and relevant civic services are delivered on time and efficiently.

Keeping this in view, I have issued instructions to all Assistant Commissioners of Wards and Zonal DMCs that they should be occupied in "well directed and well defined field operations". They must regularly move in wards to resolve the various issues of the wards and they must pay special attention regarding removal of encroachments and unauthorized constructions and intensify their

morning rounds in slums and slumlike areas and focus attention to the aspects of general cleanliness, infrastructure and issues of public health. They have also been directed to adopt atleast one footpath and make it a model footpath ensuring its aesthetic and citizen friendliness (encroachment/ hawkerfree). Specific instructions have been issued to visit public toilets in slums and other toilets to monitor their maintenance and upkeep. An organisation is judged by the speed and prudence of decision making. Towards this end, I have emphasised to the team of MCGM the need to take quick decisions suitably balanced with prudence that is demanded in public spending. I am happy to report a positive movement towards both, a faster decision making regime and also a more judicious selection of options.

The other matter of great concern which forms a part of the decision making process in my opinion, is utilization of budgetary provisions. I specifically noticed that though huge budgetary provisions are made in annual budget for various project works and procurement of plant and machineries as well as medical equipments under Capital Works Budget, these budgetary provisions are not fully utilized during the respective financial year. The draft tenders are not invited and processed in time, as such the various project works are not started and

completed as per time schedule during the respective financial year. As such, these provisions lapse and are required to be rebudgeted in next financial year or even the next few years. This is indeed not a pleasant state of affairs. It is needless to emphasize that implementation of budget proposals need be taken up in a project mode that interalia means meticulous planning, constant monitoring and execution.

I have directed all Additional Municipal Commissioners to periodically review utilization of budget provisions allocated to various departments under their jurisdiction in order to ensure timely utilization of budget provisions, transparency and timely completion of works. A specific timeline has been given to all HoDs to float the tenders for the works/projects included in the current year's budget estimates. They have also been directed to make fair assessment of estimated budget utilization under various sub-heads of the departments and if required to propose interchange in the budget provisions under various sub-heads of the department, under their administrative jurisdiction so as to ensure maximum utilization of budgetary provisions. I have also directed all HoDs to ensure that by considering the nature of work and site conditions, every technical aspect of the work should be minutely worked out during preparation of estimates so as to ensure almost nil or

bare minimum variations in the contract. Departmental review of budget provisions and utilization has, therefore, been a regular monthly feature at my level. I am confident that this will yield good results and hereafter the budgetary provisions made in the budget estimates shall be consumed to a considerable extent and budgetary as well as financial discipline will be strictly observed.

Revised Estimates 2015-16 and Budget Estimates 2016-17

The size of the Budget Estimates and the abstracts of the revenue account and the capital account under 'A' (Fund code 11, 12, 60, 70), 'B' (Fund Code 21, 22, 23), 'E' (Fund Code 30), 'G' (Fund Code 40) and 'Tree Authority' (Fund Code 50) are given below and the details thereof are given in the Annexures I to IV on pages 147 to 150.

The total size of Budget Estimates for 2016-2017 is ₹37052.15 crore, which is 39.93% more than Revised Estimates 2015-16.

The Revised Estimates of Capital Expenditure for the year 2015-16 is ₹7,630.60 crore as against ₹11,864 crore Budget Estimates. In the Budget Estimates 2016-17, the Capital Expenditure is estimated at ₹12,874.78 crore which is 8.52% higher than the current year Capital Budget Estimates.

The Estimate of the Revenue Income is ₹25,642.88 crore while the Estimate for the Revenue Expenditure is ₹24,172.71 crore for 2016-17.

SIZE OF BUDGET ESTIMATES — 'A' (Fund Code 11, 12, 60, 70) 'B'(Fund Code 21, 22, 23), 'E' (Fund Code 30), 'G' (Fund Code 40) and Tree Authority (Fund Code 50)

	Budget E	stimates	Revised E	Estimates	Budget E	stimates
Details	2015	5-16	2015-16		2016-17	
	Income/	Expenditure	Income /	Expenditure	Income/	Expenditure
	Receipts		Receipts		Receipts	
Revenue						
Income	23,438.89		21,773.29		25,642.88	
Revenue						
Expenditure		21,652.41		18,617.32		24,172.71
Capital Receipts						
Capital Receipts	10,080.26		4,706.39		11,409.27	
Capital						
Expenditure		11,864.00		7,630.60		12,874.78
Total						
Total	33,519.15	33,516.41	26,479.68	26,247.92	37,052.15	37,047.49
Excess of						
income over		0.74		221.76		4.66
expenditure		2.74		231.76		4.66
Size of Budget						
Estimates	33,519.15	33,519.15	26,479.68	26,479.68	37,052.15	37,052.15
	,	,	,			,

REVENUE ACCOUNT -

BUDGET ESTIMATES A, B, E, G &TREE AUTHORITY

Fund Code	Particulars	Budget Estimates 2016-17
REVENUI	E INCOME	
11	General Budget	18,943.56
12	Health Budget	248.86
21	Improvement Schemes	101.01
22	Slum Clearance	0.82
23	Slum Improvement	25.43
30	Education Budget	614.62
40	Water Supply and Sewerage	4,622.52
50	Tree Authority	★★ 54.39
60	Provident Fund	••
70	Pension Fund	1,031.67
	Net Income	25,642.88
REVENUE E	EXPENDITURE	
11	General Budget	★ 12,919.21
12	Health Budget	2,792.90
21	Improvement Schemes	206.39
22	Slum Clearance	6.52
23	Slum Improvement	187.14
30	Education Budget	1,644.55
40	Water Supply and Sewerage	3,010.52
50	Tree Authority	65.74
60	Provident Fund	8.24
70	Pension Fund	3,331.50
Net Expen	24,172.71	
Revenue Surj	1,470.17	
Surplus trans	1,467.72	
Surplus		2.45

[★] Excluding transfer to other budgets.

^{★★} Includes withdrawal from accumulated surplus amounting to ₹8.21 crore.

CAPITAL ACCOUNT – BUDGET ESTIMATES A, B, E, G & TREE AUTHORITY

		(t iii erore)
Fund Code	Particulars	Budget Estimates 2016-17
Capital Recei	pts	
11	General Budget	9,378.53
21	Improvement Schemes	397.30
23	Slum Improvement	31.35
30	Education Budget	324.87
40	Water Supply and Sewerage	1,265.22
50	Tree Authority	★ 12.00
	Total	11,409.27
	Transfer from Revenue Account	1,467.72
	Total fund available for Capital Expenditure	12,876.99
Capital Expen	nditure	
11	General Budget	8,476.88
12	Health Budget	900.84
21	Improvement Schemes	397.03
23	Slum Improvement	204.15
30	Education Budget	324.57
40	Water Supply and Sewerage	2,559.31
50	Tree Authority	12.00
	Total	12,874.78
	Surplus	2.21

 $[\]bigstar$ Withdrawal from accumulated surplus.

Financial position of the MCGM

While presenting the budget estimates for 2015-16, I had specifically mentioned about the noticeable downfall in the revenue income from our main source of revenue i.e. octroi, especially in octroi on crude oil since financial year 2014-15.

Unfortunately, as expected there is huge downfall in the revenue income from octroi in the current financial year. In B.E. 2015-16, gross revenue income of ₹7,900 crore was estimated. However, till 31.12.2015, we have received only ₹4,737.48 crore towards octroi and considering the average octroi receipts of ₹21.02 crore daily, it is expected that ₹1,912.52 crore would be collected towards octroi during remaining 91 days. Thus, considering other misc. receipts of ₹40 crore from Octroi department and provision of about ₹140 crore towards refund of octroi, during the year 2015-16, net income of ₹6,550 crore is only expected from the main source of income i.e. octroi. Thus, there is a deficit of ₹1,250 crore in the revenue income from this main source of income i.e. octroi. The major share of crude oil in octroi is 39%. Due to drastic fall in the prices of crude oil in the international market, the income expected from octroi is reduced to that extent. As such, in R.E. 2015-16, revenue income from octroi has to be revised to ₹6,650 crore (gross) as against ₹7,900 crore as estimated in B.E. 2015-16.

On the other hand, there is also noticeable downfall in the revenue income from Development Plan department as well, especially

in respect of revenue income from Fungible FSI, staircase and lift premium, infrastructure charges for development proposals in MHADA layouts and DCR 64(b). In B.E. 2015-16, the income from Development Plan department which was estimated at ₹5,823.82 crore has to be revised to ₹4,732.44 crore in R.E. 2015-16. Thus, there is sizeable decrease of ₹1,091.38 crore in revenue income from this source.

Considering the continuous downfall in collection of octroi since last few years, in B.E. 2016-17, the income from octroi is estimated at ₹7,000 crore (gross) as compared to estimated income of ₹7,900 crore in B.E. 2015-16 and ₹6,650 crore in R.E. 2015-16.

The D.C. Regulation 32 has been further amended by the State Govt. vide G.R. dated 04.12.2015. By virtue of this amendment, FSI is increased from 0.33 to 0.50. Premium for this shall now be recovered by MCGM/State Govt. for grant of additional 0.50 FSI which will be at the current year's Ready Reckoner Rate. This is indeed a matter of relief to MCGM since the collection of revenue from this revenue source shall now increase.

I would, however, like to note here that since last few years we were able to contribute sufficient funds to Capital Account for meeting capital expenditure as the revenue income was always exceeding the revenue expenditure. It was also then possible to transfer sufficient funds to various special funds created to meet the future requirements

of capital expenditure as a part of long term fiscal policy. In the year 2015-16, as pointed out above, however, there is noticeable decrease in the revenue income particularly in the revenue income from our main source of revenue i.e. Octroi and the Development Plan department. Hence in the B.E. 2016-17, we would be able to contribute only ₹173 crore to the Capital Account for meeting capital expenditure for B.E. 2016-17.

The capital expenditure for the year 2016-17 is estimated at ₹10,303.47 crore which is proposed to be met interalia by withdrawing funds of ₹5,509.72 crore from various special funds created in consonance with our long term fiscal policy.

The Union Government has introduced 122nd Constitutional Amendments Bill in the Loksabha on 19th December, 2014 to facilitate the introduction of the Goods and Services Tax (GST) regime in India. While the Govt. intends to put in place a system to suitably address and compensate the loss of octroi, it is also now necessary that MCGM begins a process of restructuring its fiscal resources. We would need to consider alternate taxation sources to broad based tax collection and maintaining the buoyancy that octroi offers. Towards this end, we are in dialogue with the Government and also actively considering various options.

Thus, on the one hand, there is continuous downfall in the revenue income from the major source of revenue i.e. octroi while on

the other hand, there might not be sufficient reserve funds available in various Special Funds created to meet the capital works expenditure. Therefore, it has become extremely essential to restrict the expenditure within the revenue resources, especially on establishment. Our first priority will, therefore, be to ensure financial stability so that shortage of resources does not mar the developmental works in future. Accordingly, as a part of long term policy, it is necessary to increase the contributions to the various funds as well as to create new funds. We need to ensure that the pace of infrastructure development and delivery of civic services is maintained by making our operations cost effective and achieving higher operational efficiencies.

With a view to increasing MCGM's revenue, I have directed all the HoDs to review the various charges/fees charged by their respective departments for which approvals of Improvements Committee/Standing Committee/Corporation are required and put up the proposals expeditiously. I have also directed A.M.Cs to hold meetings to explore the feasibility of Additional Resource Mobilisation (ARM) and come forward with such proposals on priority basis. Also, I have instructed the A.M.Cs. and HoDs to rigorously follow up for recovering the dues pending with various Govt. bodies at their level. While we make efforts to increase revenues, I have also instructed my team to improve efficiency and cut wasteful expenditure with a heavy hand.

Now, I enumerate provisions under Budget Estimates 'A', 'B' & 'E'. The Budget Estimates for the year 2016-17 alongwith Budget Estimates and Revised Estimates for the year 2015-16 (Budgets A, B & E) on Revenue Account are given in the following Table:-

Table-1 Revenue Account Budget A, B, and E (₹in crore)

Particulars	Budget Estimates	Revised Estimates	Budget Estimates
	2015-16	2015-16	2016-17
Revenue Income	19,255.57	17437.45	20871.54
Revenue Expenditure	18,392.89	15512.43	20696.09
Surplus during the year	862.68 (Surplus)	1925.02 (Surplus)	175.45 (Surplus)
Transfer to Capital Account	862.00	1924.00	173.00
Surplus	0.68	1.02	2.45

CAPITAL ACCOUNT

(₹ in crore)

	Budget	Revised	Budget
Particulars	Estimates	Estimates	Estimates
	2015-16	2015-16	2016-17
Capital Receipts	9,306.77	6,284.40	10,305.05
Capital Expenditure	9,305.25	6,050.02	10,303.47
Surplus	1.52	234.38	1.58

The above table shows that the revenue income as per B.E. 2015-16 which was ₹19,255.57 crore is revised to ₹17,437.45

crore in R.E. 2015-16. The estimated revenue income for 2016-17 is ₹20,871.54 crore which is 8.39% higher than the estimated revenue income for the current year. This increase in estimated revenue income for the next financial year is due to estimated increased revenue income from the source of grant of additional 0.50 FSI as against 0.33 FSI at the current year's Ready Reckoner Rate by virtue of amendments in D.C. Regulation 32.

In the year 2015-16, the Revised Estimates of Revenue Expenditure including transfer to Capital Account is ₹17,436.43 crore as against Budget Estimates of ₹19,254.89 crore resulting into saving of ₹1,818.46 crore.

Likewise, revised capital expenditure is estimated at ₹6,050.02 crore as against Budget Estimate of ₹9,305.25 crore. The revision in capital expenditure coupled with saving in revenue expenditure being available for Capital Works, there is no need to raise internal loan of ₹2,000 crore this year as envisaged in the B.E. 2015-16.

The Capital receipts for the year 2016-17 are estimated to ₹10,305.05 crore which mainly consist of contribution from Revenue Account, withdrawal from Special Funds and internal loan to the tune of ₹2,000 crore. The Capital Expenditure for the year 2016-17 is estimated to ₹10,303.47 crore which is higher by 10.73% than the B.E. 2015-16.

For estimation details of various sources of income vis-a-vis Budget Estimates of revenue income under Revised Estimates for 2015-16 and the Budget Estimates for 2016-17, I refer to Table 2 which gives the details of various sources of income with comparative position of Budget Estimates for 2014-15.

Table-2 - Details of Revenue Income Budget A, B, and E

Sr.	Particulars	B.E.	R.E.	B.E.	R.E.	B.E.
No.		2014-15	2014-15	2015-16	2015-16	2016-17
1.	Octroi (Net)	7,800.00	7,100.00	7,725.00	6,550.00	6,895.00
2.	Property Tax	2,259.66	2,150.00	2500.05	2,500.05	2,738.89
3.	Receipts from Development Plan	4,444.27	5,074.82	5,823.74	4,732.44	6,284.71
4.	Interest	1,026.05	1,178.50	1,082.40	1,379.13	1,507.10
5.	Grant-in-Aid from Government	322.88	248.10	251.38	224.23	240.96
6.	Receipts from Roads & Bridges	664.33	483.16	545.79	657.47	697.94
7.	Supervision Charges	350.00	350.00	350.00	480.00	825.00
8.	Solid Waste Management	112.80	103.87	112.10	97.81	115.83
9.	Receipts from Hospitals & Medical Colleges	130.38	136.45	151.90	145.77	151.24
10.	Receipts from License Deptt.	168.09	149.86	164.46	150.84	168.03
11.	Receipts from Markets &Deonar Abattoir	92.28	50.53	58.67	39.01	51.64
12.	Other Receipts	588.08	543.82	490.08	480.70	1,195.20
	Total	17,958.82	17,569.11	19,255.57	17,437.45	20,871.54

ADMINISTRATIVE REFORMS

Effective Performance Management

We are making concerted efforts to bring efficiency in our operations and simultaneously simplify and bring greater satisfaction at the interaction point with citizens. Towards this end, special emphasis will be laid to upgrading the skill set of our employees and engineers, with greater emphasis on inhouse training with suitable outside intervention. This year, I propose budget allocation of ₹4 crore. We also propose to revamp CTI&RC, to take up a wide range of training programmes for different levels of employees.

SAP HR Module

Over the last 6 months, we have undertaken a drive to activate the SAP HR module. Monthly Salary payments of all the municipal employees are now being made through SAP HR Module since November, 2015. SAP HR Module will help in regularizing the irregularities / discrepancies, if any, in the Establishment Schedule

Every employee will be provided with a unique user id which will enable them to see their personal details such as payment slips, leave details etc. from their computer. Thus all the employee related work will be carried out through the IT system.

Pension and Provident Fund claims will also be attached to the SAP HR Module in future. This, it is hoped, will bring more efficiency in the human resource management process.

Bio Metric System

We have already initiated steps to implement the Bio Metric Attendance System based on Aadhar Card Number. The first phase is expected to be implemented by 15th March, 2016. The finger print impression and 4 digits of Aadhar Card Number will be used for noting the attendance of municipal employee.

The Bio Metric System will be integrated with SAP HR Module which in turn will help disbursement of monthly salaries as per the attendance recorded through Bio Metric System. We intend to roll out the bio metric attendance system across the Corporation over the next financial year and I propose to allocate ₹10 crore in the budget for this purpose.

Right to Services Act, 2015

As per the provisions under the Right to Services Act 2015, total 14 services from Health, Development Planning, Hydraulic Engineer, Sewerage Operations and Mumbai Fire Brigade of the MCGM have been notified and the detailed time frame for providing services, required documents and responsible officers has been published. We have already provided 12 services online and intend to make all services online in the financial year 2016-17.

Expeditious Tender Invitation

In order to avoid the abnormal delay in publishing a tender notice on MCGM portal after seeking administrative approval, a system of tracking/monitoring any delay has been developed in SRM Module w.e.f. 17.12.2015.

Collection of Property Taxes/ Water Bills through various branches of Banks

At present, citizens can make payment of Property Tax/water bills through the Mobile and web applications of MCGM and at the Ward CFCs. We also have a facility for payment of taxes at Cyber CFCs through Private Vendor Outlets like Infobay, Paypoint etc. Considering the wide network all over Mumbai, we shall be starting collection of Property Tax through banks in this financial year. Initially, a pilot project will be implemented and on successful implementation of the same, more banks and branches will also be included in the said project. This will facilitate the citizens to pay their Property Taxes/Water bills by the method most convenient to them.

New policy for governing Variations of Contracts

With a view to controlling abnormal variations of a contract during execution, the "Decision Rules" already framed have been reviewed after studying the policies of various other Govt. departments/ organizations and a new policy for governing extra/excesses have been framed with cap on the value of extra/excess work. This has brought greater discipline in tender preparation and execution.

e-tendering

Over the last 6 months, we have moved the complete tendering process online. Earlier the EMD and ASD were accepted in physical form. This seriously compromised the confidentiality of the tendering process. Suitable amendments were made to the e-tendering software and from 05.11.2015 to ensure that EMD and ASD are also filed online.

This has ensured confidentiality and an environment for fair competition in the tendering process.

'Group Insurance' for MCGM employees

I am glad to mention here that as promised in my statement while submitting the Budget Estimates of 2015-16, a Comprehensive Group Health Insurance Scheme has been implemented from 1st August, 2015 for all municipal employees through M/s United India Insurance Co. with the approval of Standing Committee/Corporation.

This scheme shall be cashless for municipal employees and their spouse + 2 children with sum assured upto ₹5 lakhs. 4000 hospitals throughout India (320 hospitals in Mumbai, New Mumbai, Thane & Panvel) will provide cashless facility to municipal employees under this scheme. This policy also covers accidental benefit to employees. The employees retired from 01.04.2011 can also get the benefit of this policy with minimum premium. Corporate buffer will be ₹5 lakh which can be utilised in cases when sum insured has been exhausted. For critical illness, policy provides ₹1 lakh cash assistance.

A provision of ₹96 crore is proposed in B.E. 2016-17 for this scheme.

Ease of doing business

In MCGM, we have redefined ease of doing business to go beyond just facilitating the setting up of business in Mumbai to actually bringing delight in every operation that the citizen transacts with the Corporation. As a part of this, my team has assiduously worked towards not only simplifying forms but also improving processes. This work has led to simplification of estate, water supply and other departments.

MCGM is working on resolving the specific issues of the business organisations in co-ordination with concerned departments. We have worked on streamlining the process for Film Shooting permissions and outdoor event permissions and are currently working on streamlining the procedures for Restaurant licensing and Factory permits which would further bring about transparency and predictability in the regulatory environment.

We have recently undertaken major reforms to speed up grant of building permits. The building industry not only creates housing stock for the City but also generates over ₹4500 crore annually in revenues for the MCGM. The building permit process has been recast by reducing number of permissions required and making the system transparent, predictable and fixing responsibility at various levels. This is an ongoing process and in the current year, we intend to completely I.T. enable it and generate reports to facilitate better monitoring and greater transparency.

It is my privilege to announce that Mumbai, the Business Hub and the financial capital of India, has got the opportunity to host the first ever "Make in India Week" which is being co-organised by Department of Industrial Policy and Promotion (GOI) and Government of Maharashtra. We have created a "Single Window System" for grant of permissions for various events and exhibitions being organised during the Make in India week. This would provide a global platform for MCGM to showcase the various initiatives towards Ease of Doing Business.

In the coming year, MCGM will work on "Branding Mumbai" exercise which will further consolidate and strengthen the status of Mumbai as an International Business Hub.

Loan to BEST

Considering the present financial position of BEST, it is proposed to give tied loan of ₹10 crore to BEST for infrastructure development and purchase of capital equipments e.g. buses. However, this shall be subject to BEST submitting a plan which indicates a trajectory which will be followed to improve financial performance. The funding will be strictly tied to the improvement shown on important financial parameters.

Service delivery to Urban Poor

With a view to extending various civic services to the urban poor and improving the standard of these services, a total provision of ₹9,187.95 crore is proposed in B.E. 2016-17 under the following heads:-

(₹ in crore)

Gaothans, koliwadas and adivasipadas	27.36
Adhar Kendras	2.01
Upgradation of slums	610.62
Improvement, management and maintenance of chawls for poorer classes.	677.07
Primary Education(Budget 'E')	2,394.10
Secondary Education	233.89
Health	3,286.63
Water Subsidies	1,844.84
Others	111.43
Total	9,187.95

The provision of the XIIth Schedule of the Constitution of India referred to by Article 243W and the obligatory duties under Section 61 of the MMC Act, 1888 have been considered while proposing the budget. I shall now elaborate on Budgets 'A', 'B' and 'E' departmentwise.

ASSESSMENT & COLLECTION DEPARTMENT

(₹ in crore)

Revenue Income					
	B.E. 2015-16	R.E. 2015-16	B.E. 2016-17		
1. Octroi (Net)	7,725.00	6,550.00	6,895.00		
2. Property Tax -					
Budget 'A' & 'E'	2,500.05	2,500.05	2,738.89		
Budget 'G'	1,997.05	1,997.05	2,196.76		
Tree Authority	16.43	20.53	20.53		

Slum Assessment

It is mandated that every structure in any urban local body shall be covered in the Property Tax net. Hence, it is necessary to cover slums under property tax. However, considering the number of slum structures in Mumbai, it is not feasible to levy property tax based on Capital Value. Therefore, it has been proposed to amend the provisions of the MMC Act, 1888 to levy Property Tax on lumpsum basis on each of the structures in the slums of Mumbai. Accordingly, a proposal has been moved to the Law Committee, for further recommendation to the Corporation. After approval of the Corporation, the proposal shall be sent to the State Government for the necessary amendment.

Application of Section 152A of the MMC Act

Section 152A has been included in the MMC Act while carrying out the amendment to the MMC Act for implementation of Capital Value system. A provision of levying penalty at the rate of 200% of the Property Tax payable per year on unauthorized construction is made in the said section, so as to control unauthorized constructions. The department has issued a circular under No. कवसं/सां/04/15-16 dated 10.12.2015 for implementation of said Section.

360 degree Lidar Survey:

Survey of all properties excluding slums will be carried out through 360 Degree Lidar Survey. The survey shall be carried out by vehicle mounted cameras which will capture 360 degree panoramic images of properties. The Lidar data will help to double check the measurement of the properties, which have been done manually. The images, thus, will be helpful in identifying unassessed properties, and increase the tax net.

It is expected to complete the work by March, 2017. A provision of ₹12 crore is proposed in B.E. 2016-17.

Early Bird Incentive

"Early Bird Incentive" scheme which was introduced in the year 2014-15 in order to encourage the tax payers to make early payments is proposed to be implemented this year as well. A provision of ₹9 crore is proposed in B.E. 2016-17 for this scheme.

OCTROI

In view of likely abolition of Octroi from 01.04.2016, we have curtailed major works at the octroi posts. However, to check evasion, we have stepped up vigilance and have taken up numerous steps like CCTV Cameras, digital weigh bridges and stepped up vigilance in the Octroi check posts. As a matter of policy, all private security guards have been replaced by MCGM security personnel. This has resulted in better discipline and recovery.

Octroi Refund

The software for refund of octroi has been developed and the refund claims will now be processed through IT enabled system thereby avoiding manual intervention. The refund procedure has been streamlined to arrest malpractices and to safeguard the interest of the Corporation.

Abolition of Octroi on Ethanol

Ethanol is blended with petrol, etc. replacing to a certain extent of our nation's dependence on fossil fuel imports. Presently, Octroi duty is leviable @ 7% ad valorem on this green fuel of the future. In the current financial year the collection of Octroi on Ethanol is ₹15.68 lakh only. In order to encourage use of Ethanol and to attract industry, it is proposed to abolish Octroi on Ethanol.

Increase in the rate of Octroi on Crude oil

Due to drastic reduction in the prices of crude oil in the international market, the Octroi recovered on import of crude oil has

been declining since last 2 years and in current financial year by approximately ₹600 crore. As such, it is proposed to increase the rate of Octroi on crude oil from 3% to 4.5% ad valorem, which will fetch additional revenue of ₹500 crore at current price.

DEVELOPMENT PLAN

Urban Planning including Town Planning

(₹ in crore)

Revenue Income				
	B.E. 2015-16	R.E. 2015-16	B.E. 2016-17	
Development Plan Department	5,823.82	4,732.44	6,284.71	

Revision of Draft Development Plan 2034

The Corporation, by its Resolution No.1195 dated 23.2.2015 had accorded sanction as required under the Section 26(1) of the MR&TP Act to publish the Draft Development Plan 2034 of Greater Mumbai for inviting suggestions/objections from general public. The Draft Development Plan of Greater Mumbai along with the Development Control Regulations was accordingly published in the Government Gazette and in the local newspapers.

In view of the spate of criticism that ranged from errors to lapses in key policy matters, the State Government on 23rd April, 2015, issued a directive to the MCGM, under Section 154 of the M.R. & T.P. Act,

1966 to examine all the errors on the basis of existing site conditions and its merits by considering the planning and legal issues. The MCGM accordingly, was directed to make necessary corrections and republish the Draft D.P. for the purpose of inviting suggestions/objections as per the provisions of Section 26 of the M.R. & T.P. Act, 1966, by obtaining prior approval of the Corporation within the period of 4 months which has further been extended up to 31.05.2016.

The process of revision of DDP 2034 began with the mainstreaming of Ward staff and central DP team of the Corporation into the revision work. Emphasis was on ground level verification. The ward staff looked at key aspects of the DP and was assisted by a group of young urban planners. This allowed for greater ability to visit sites, improved accuracy and qualitative improvement in the final product.

In the first phase, the designations were verified on site. This was followed by a site verification of roads. Both these jobs involved a great deal of policy enunciation and conceptual clarity in deciding what constituted error and what did not. Detailed guidelines were issued to staff to enable site inspection. The revisions carried out have been posted on MCGM web portal for comments/observations. The work on the D.P. is being put in public domain as and when each part is ready, so as to involve the citizens in the planning process.

The DDP 2034 aims to balance the city's economy with environment and social equity. It is looking to enhance open spaces and recreational avenues. It stresses the creation of affordable housing, one of the most critical deficiencies in the city. It especially provides for the

needs of women, the aged, differently-abled and the informal sector. These include provisions for hawking and urban livelihood such as homeless shelters and Aadhar kendras. In view of the great importance of education, health and institutions, the revision process is looking at strengthening these areas through adequate land provision. At the same time, it is working towards retaining Mumbai's primacy in the region's, State's and Country's economy.

The revision effort is also directed towards a full implementation of the DP through a combination of a new Accommodation Reservation Policy combined with FSI and TDR that would take negativity out of reservations. Gap analysis for the quantum of shortfall in the various categories of reservations is being worked out.

Concepts such as TOD, Premium FSI, Zones, Parking Provisions, Acquisition of Layout RGs, Development proposals in Aarey, Local Area Planning are being reviewed along with requirements of BUA (Built Up Area). The revision is set to restore standards that were diluted so that adequate public amenities get provided. TDR indexation on the basis of Ready Reckoner Rates, a new system of legends, staircase requirements, helipad provisions, provisions for differently-abled, commercial built-up space are proposed to be incorporated. A new set of DCRs that combine the best features of 1991 and DDP 2034 are being readied. They are being framed in a manner that they catalyze development, and are being put in place after larger public consultation process.

Provisions that take care of environment, climate change, fire and safety are important areas that the revision process is detailing out. So is Heritage, both from protection and incentivization angle.

The revision has an eye on ease of doing business. It is, therefore, looking at simplifying the process of permission for development. This will lead to rationalization of premiums. This is being counterbalanced by the promotion of land instruments that would allow DP implementation without undue pressures on the municipal budget.

Functioning of Development Plan department

- 1. The Section 22 (m) of the Maharashtra Regional & Town Planning Act, 1966 has been amended in the year 2010-2011 due to which MCGM is entitled to levy premium while regulating development of lands within Greater Mumbai.
- 2. In view of the abovesaid amendment, the D.C.Rules are amended to facilitate recovery of premium while allowing development. The State Govt. has amended the Regulation 32 in 2011 which has enabled MCGM/State Govt. to recover premium for grant of additional 0.33 FSI. In the year 2015-16, it is proposed to generate approx. ₹187 crore. The said Regulation has been further amended by State Govt. on 04.12.2015 and by virtue of which the F.S.I. is increased from 0.33 to 0.50 and premium is now to be recovered by MCGM/ State Govt. for grant of additional 0.50 FSI which will be at the present Ready Reckoner Rate. Thus collection of revenue shall now increase. Therefore provision for

- generating revenue of ₹1,241 crore is made for 2016-17 as against ₹350 crore in the current financial year.
- 3. An anticipated amount of ₹1,914 crore shall accrue in the year 2015-16 from grant of fungible FSI. In this year, we have recovered ₹1,442.35 crore till 31.12.2015 and S.R.A. has collected ₹217.40 crore (upto 31.12.2015). The target set is expected to be achieved.
 - However, as per Govt. notification received on 20.10.2015under No.TPB 4315/CR-142/2015/UD -11, 1/3rd premium collected from grant of fungible FSI is now to be given to State Govt. which will affect the revenue collection from this revenue source with effect from 20.10.2015.
- 4. Through Auto DCR application, concession and other approvals are being issued through the online application since 15.05.2015 and all the documents are available on MCGM portal.
- 5. MCGM recently published circular regarding 'Ease of doing Business' on 29.12.2015, also launched New Simplified, Predictable, Time bound and Standardised Building Permission Manual on 02.01.2016 to make the applicant / architect, consultant and citizens aware about the procedure of construction permit.
- 6. In order to create simplicity, ease and transparency in granting construction permit, MCGM on 02.01.2016 has published building permission Manual Version (1.1) along with the circular No. Ch.E./DP/49/Gen/2015-16 dated: 29.12.2015. There were about 119 steps involved in granting the building permissions from the

various departments of MCGM. These 119 procedures have been brought down to 58 Nos. by eliminating / outsourcing the Remarks/NOCs required for granting the building permissions. 212 Nos. of forms of 14 Nos. of MCGM Department have been standardised and simplified, 24 Nos. of forms are now abolished from the requirement for the building permissions. Each simplified form is now given a specific timeline for taking decision and disposal.

SMART CITY PROJECT

MCGM has participated in the Smart City Project initiated by Govt. of India. The philosophy behind this concept is that the City should be citizens centric, inclusive, IT enabled and sustainable. Accordingly, Detailed Project Report had been prepared and submitted to Govt. of India alongwith the conditions as recommended by the Corporation.

Though, Mumbai doesn't figure in the first list of 24 Smart Cities selected by the Govt. of India, there is no reason why we should lose hope in a competitive environment, where cities are competing to attract investment and generate employment. Winning or losing are part of competition in a democracy. We are reasonably confident that with the robust business like environment of Mumbai and carefully prepared comprehensive DPR, Mumbai will be selected in the next round.

The administration of MCGM will make every attempt to figure in the list of Smart City in the next round of selection. Therefore, I propose a budget provision of ₹10 crore as MCGM share towards Smart City Project.

INFORMATION TECHNOLOGY

(₹ in crore)

	Budget Estimates 2015-16	Revised Estimates 2015-16	Budget Estimates 2016-17
Revenue Expenditure	154.65	146.78	178.74
Capital Expenditure	124.12	70.16	144.82
Total	278.77	216.94	323.56

Projects in Progress

1) Vehicle Tracking & Monitoring System

MCGM, as one of its major IT initiatives, have implemented Vehicle Tracking and Monitoring System (VTMS) to monitor, manage and track vehicles owned by MCGM. The VTMS solution uses High end Smart communication devices like Global Positioning System (GPS) and Radio Frequency Identification (RFID) to manage, maintain and track the vehicles of Solid Waste Management and Storm Water Drainage departments. The project consists of GPS based solution for web based automatic vehicle tracking and telemetric fleet management incorporating Global Positioning System (GPS), combined with

GPRS/GSM, Radio Frequency Identification and digital map technology. A budget provision of ₹2.50 crore has been made for this project in B.E. 2016-17.

2) Online Application for Registration of Shops and Establishment

For first time, registration for Shop and Establishment online application is developed and implemented. This application is integrated with payment gateway. On making the payments, the system generates a provisional certificate and a receipt is sent to the registered email address. This has brought transparency and efficiency in the process and enabled the citizens to make the payment from their respective locations without visiting MCGM office.

3) Document Management System (DMS) - (Cloud Technology Based)

The DMS will serve as a repository and be accessible to users within MCGM as well as to citizens. The DMS shall be a major step in promoting transparency while saving precious time and efforts on the part of the citizens to source those documents visiting MCGM offices in person. Citizens can source the documents online by using Tag Words. A budget provision of ₹9 crore has been made for this project in B.E. 2016-17.

4) Upgradation of Internet Leased Line

Internet speed of MCGM network is enhanced from 45 Mbps to 140 Mbps for faster internet connectivity. This was completed in the month of November, 2015 at a cost of ₹20 lakh.

Proposed Projects 2016-17

1) Healthcare Management System

Steps have been taken to implement a comprehensive Healthcare Management Systems covering all MCGM Hospitals, to provide efficient healthcare services to the citizens by re-engineering the existing manual processes. Presently, bid management is in progress.

By end of financial year 2016-17, Site Survey, Hardware deployment for hosting data and software, Software development and User Acceptance Test for Hospital management System is planned to be completed. This will enable lakhs of citizens to access Public Health Care in MCGM Hospitals in seamless manner. A provision of ₹39.15 crore has been made in B.E. 2016-17 for this project.

2) Online Trenching

MCGM has developed work flow based system application for Online Trenching Management. It is integrated with payment gateway and covers Open, Water, HDD and micro trenches. Utility companies can make the request and make requisite payment online. The MCGM officials will approve and issue permit online thus increasing the transparency, efficiency in the process and reducing

the lead time. This will be activated in one month. The same has been implemented internally.

3) Interactive Enterprise Portal

MCGM has initiated the development of an enterprise citizen centric portal that would integrate applications and services of various departments. The portal shall facilitate personalization and customization of content and layout as per role, help exchange and manage knowledge, integrate with social media for notifications, adhere to various e-governance standards and provide effective reporting and analysis. It is decided to launch this interactive portal for access by citizens with compliance of NIC/GIGW guidelines. This Portal is expected to be up and running in next one month. A provision of ₹65 lakh has been made for this project in year 2016-17.

4) Upgradation of Hardware at Data Centre

It is proposed to upgrade the Memory, Servers, Storage, so as to ensure better system performance in optimal manner. This is expected to be completed by July, 2016, costing approximately ₹2.50 crore.

ROADS & TRAFFIC DEPARTMENT

	Budget	Revised	Budget
	Estimates	Estimates	Estimates
	2015-16	2015-16	2016-17
Revenue Expenditure	666.82	559.72	690.70
Capital Expenditure	3,207.76	2,456.20	3,863.77
Total	3,874.58	3,015.92	4,554.47

• In B.E 2016-17, the budget provision of ₹2,806.80 crore is proposed for improvement of roads in Mumbai

Major Policy changes in Road works

- ◆ So as to improve the riding quality of existing roads as per the recommendations of Standing Technical Advisory Committee (STAC) and report of Technical consultants, road crust is to be re-designed taking into account SWD and other utility works.
- ◆ It has been decided to do away with Paver Blocks on all Municipal Roads with immediate effect. This will go a long way in improving the riding quality.
- ◆ In order to make the existing bidding process more competitive, simple and transparent, necessary modifications are made in pre-qualification criteria and entire tender process is made online for all works.
- ◆ The qualifying requirements have been rationalized and many restrictive conditions have been removed. This will ensure more competition and competitive rates.
- ◆ Special emphasis on inspection of roads will be given. Surprise checks will be conducted to ensure road quality.
- ◆ For the first time, permission of Traffic Police has been obtained by Roads & Traffic Department to carry on road works during

- day time as well. This will speed-up road works and reduce substantially their completion schedule.
- ◆ New Trenching guidelines have been put in place for speedy approvals, effective supervision and at reasonable rates.
- ◆ To increase speed of completion and also use the existing infrastructure, road cross section has been completely redesigned and specific designs for specific roads have been given.
- ◆ We also propose to use early setting concrete to reduce curing time to 7 days from the present 28 days. This will ensure early completion of road works and reduce traffic disruptions.

Improvement and concretisation of Roads

- ◆ I am happy to state that important and major roads such as Keshavrao Khade Marg, Dr.Nanabhai Moss Marg, V.K.Shah Marg, Jamnalal Bajaj Marg, Nathalal Parikh Marg, JTS Malani Marg, Y.M Road, Sitaram Ghadigaonkar Marg, Sant Gadge Maharaj Road in island city have been concretised.
- ◆ Borsa Pada Road, Lokhandwala Complex Road in Western Suburbs have been concretised.
- ♦ Kurla Terminus Road, Mother Dairy Road, Vidhyavihar Station Road in Eastern Suburbs have been concretised.

♦ A provision of ₹1,340.01 crore is proposed for Cement Concrete Roads in the year 2016-17. All the works will start before monsoon 2016.

Among the major roads proposed to be taken up in 2016-17 are M.G.Road, Tardeo Road, Aacharya Donde Marg (part), G.D.Ambekar Marg (Part) in **island City**, improvement of side strips and footpath of Veera Desai Road, Achyutrao Patwardhan Road, concretization of Shraddhanand Road in **Western Suburbs** and Ghatkopar Mankhurd Link Road, Andheri Ghatkopar Link Road, L.B.S Marg, in **Eastern Suburbs**.

- Improvement of Asphalt/ Mastic Roads
- ◆ In City area important roads such as Imamwada Road, Veer Nariman Road Adarshnagar, Bhagoji Keer Cross Road, Mahim Fort Road, S.L.Raheja X Road No.9, Dr.Babasaheb Jaykar Marg, in Western Suburbs - Ansal Vihar Road and Aarey Road are completed and in Eastern Suburbs Pandit C.R.Vyas Marg, Jogeshwari Vikhroli Link Road, 14th Shivaji Nagar have been completed.
- **♦** A provision of ₹1,466.79 crore is proposed for Asphalt / Mastic Roads in the year 2016-17. All these works will start before monsoon 2016.

- ◆ Among the major roads proposed to be taken up in 2016-17 are Nagindas Master Road, Dongarshi Road, Pratiksha Nagar Main Road, Old Prabhadevi Marg, in City, MIDC Road, Pipeline Road, Marve Road at Madh village, T.P.S Road in Western Suburbs and A.H.Wadia Road, 10th Road Chembur, B.P.Cross Road No.4 in Eastern Suburbs.
- Junctions: Special importance is being attached to improvement of all major junctions along main roads and major junctions have been selected to strengthen and improve by mastic / asphalt so as to provide riding quality and reduce traffic congestion at various junctions. The junction works are to be started on priority basis with the speedy work in the next four months.

In City area 52 junctions (approx. cost ₹120 crore), in Western Suburbs 45 junctions proposed to be improved (approx. cost ₹55 crore) and in Eastern Suburbs 25 junctions are proposed to be improved (approx. cost ₹26.4 crore)

- International Standard Street Name Boards and Direction Boards:
- Traffic Signages are a very important part of traffic management.
 With a view to install and upgrade Traffic Signages and
 Direction Boards to International Standards and befitting

Mumbai, MCGM has designed and completed tender process in this respect.

◆ Accordingly, Directional Boards, Street Name Boards, cautionary/mandatory traffic signs will be installed in Mumbai. The work is likely to be started from first week of February and is expected to be completed within one year. The cost of work is about ₹9.65 crore. A provision of ₹7.01 crore is proposed in B.E. 2016-17.

◆ LED Street Lights

It is proposed to convert at least 10% of MCGM Street Light to LED during 2016-17, as this would go a long way in saving the energy bills and saving much valuable energy resources of the country. While changing to LED lights, it will be ensured that lux levels as stipulated in the standards and norms are followed. I, therefore, propose budget provision of ₹10 crore towards LED Street Lights. Bid process will start very soon in this respect.

Road Improvement-Utility Duct

In the improvement/reconstruction of roads and junctions, the service utility ducts are provided at regular intervals, utility ducts are ideal to transfer, carrier for the utilities across the roads and junctions as well. The provision of ducts avoids undue excavation and enhance durability and life of the roads and junctions

Mumbai Coastal Road Project

The Mumbai Coastal Road Project is one of the most prestigious projects to be undertaken by MCGM. The Coastal Road Project of 33.20 km from Nariman point to Kandivali is proposed to resolve the traffic congestion in Mumbai in addition to providing several environmental friendly features to the city. The proposed Coastal Road having a 4+4 lane configuration comprises roads based on reclamation, bridges, elevated roads and tunnels. The tentative construction cost of Mumbai Coastal Road Project is ₹12,000 crore as per 2012-13 estimates.

The Mumbai Coastal Road Project will reduce the travel time, decongest existing roads, reduce the air and noise pollution levels, improve public transport by a dedicated BRTS and also generate much needed additional green spaces.

The Draft DPR for the Coastal Road Project has been completed. In conformity with best practices, we have published the entire DPR on our website and invited comments from the citizens. We have also appointed the consultants for the peer review of the DPR and the same is in progress. The modification in the CRZ notification 2011 has been sanctioned by MoEF – Govt. of India on 30.12.2015, which allows reclamation in sea for the purpose of Coastal Roads. We have completed the EIA and accordingly submitted the application to MCZMA on 12.01.2016 for requisite clearance. The said item was discussed in the 111th meeting of MCZMA held on 16.01.2016.

The contracts for execution of the work are expected to be awarded in 2016-17 after receipt of necessary clearances. A budget provision ₹1000 crore is proposed for the work.

BRIDGES DEPARTMENT

(₹ in crore)

	Budget	Revised	Budget
	Estimates	Estimates	Estimates
	2015-16	2015-16	2016-17
Revenue Expenditure	13.61	9.05	14.26
Capital Expenditure	602.13	406.63	615.07
Total	615.74	415.68	629.33

I am happy to note that Bridges Department of the MCGM has completed the long pending Jogeshwari (South) ROB in the current year carrying over 40,000 vehicles daily.

Similarly, the work of Jogeshwari (North) ROB is nearing completion and the same is expected to be commissioned very soon.

The work of construction of Flyover Bridge at junction of S.V. Road and Veer Savarkar Marg at Goregaon (West) is in progress and about 15% work is completed.

The work of construction of three bridges on Rafiq Nagar Nalla, Govandi in M/East is completed, whereas, the works of two F.O.Bs and five bridges on Nalla, in E.S., one bridge on Nalla in City and three bridges on Nalla in W.S. are in progress.

The work of repairs and renovation of Churchgate Subway is started and for Sion Subway is being started shortly.

New works proposed

FOBs and Bridges

The reconstruction work of F.O.Bs near Charni Road Railway Station and construction of skywalk to connect Jogeshwari (East) and Jogeshwari (West) are expected to be started from October, 2016. A budget provision of ₹9 crore is made for this work in B.E. 2016-17.

Flyovers

- (1) It is proposed to connect S.V. Road to Linking Road by extending Jogeshwari (South) Flyover. Similarly, the said flyover will be extended along JVLR crossing Western Express Highway in the year 2016-17. A budget provision of ₹2 crore is made for this work in B.E. 2016-17.
- (2) Jogeshwari (North) Flyover is proposed to be extended crossing S.V. Road towards Linking Road in the year 2016-17. Tendering procedure of these works will be completed in the next six months. This will ease traffic congestion in Western Suburbs. A budget provision of ₹1 crore has been made for this work in B.E. 2016-17.
- (3) A flyover is proposed at JVPD Circle in Western Suburbs and provision of ₹1 crore is made for this work in B.E. 2016-17.
- (4) It is proposed to build flyover at south bond of Sangeetkar Sudhir Phadke Bridge in Borivali (West), connecting W.E.H. A budget provision of ₹1 crore is made for this work in B.E. 2016-17.

(5) A flyover is proposed at Lokhandwala Back Road to Yari Road, Amarnath Tower. A budget provision of ₹5 crore is made for this work in B.E. 2016-17.

ROBs

The Hancock R.O.B. is proposed to be reconstructed. The estimated cost of reconstruction is ₹28 crore and the tenders have been invited. A provision of ₹10 crore is proposed in B.E. 2016-17.

The approaches of Vikhroli R.O.B. are being constructed by the MCGM. The estimated cost is ₹31 crore. Also, the tenders for this work have been invited. A provision of ₹14 crore is proposed in B.E. 2016-17.

Goregaon-Mulund-Link-Road Project (GMLR)

The Goregaon-Mulund-Link-Road is one of the major link roads according to Master Plan for Road Network improvement and Traffic Dispersal Study of Greater Mumbai. The Western and Central Suburbs of the city are fast developing resulting in traffic congestion.

MCGM has proposed the Goregaon-Mulund-Link-Road as a part of East-West connectivity of the City. This will help to reduce the traffic congestion and travel time, decongest the existing roads and improve public transport.

The previous alignment of the GMLR has been reconsidered, since it traversed the Vihar Lake and also affected the present and future planning of water supply to the city. At certain locations, the proposed alignment come dangerously close to the existing water main.

In order to have a world class facility, it has been decided to have a peer review conducted by an International Consultant. Accordingly, a Japanese Firm, by the name of M/s Padeco Ltd., has been appointed for peer review of the existing work, finalization of most suitable alignment and bid process management of Goregaon-Mulund-Link-Road. The work is now proposed to be carried out in 3 phases. In the first phase, the ROB at Nahur shall be widened, the work of which will commence in 2016-17. The 2nd phase would involve widening of the existing GMLR as shown in the DP along with rehabilitation of the eligible PAPs. We plan to start this also in 2016-17. The 3rd phase would involve construction of an underground tunnel connecting the existing DP road from Film City to Khindipada Bhandup junction. This would require clearances from MoEF and other regulators. We have kept an ambitious target of commencing this work in the coming financial year as well.

Budget provision : ₹130 crore

Ghatkopar-Mankhurd Link Road

The tender for construction of a major flyover of about 2.1 km. long covering three major junctions namely Shivaji Nagar, Bainganwadi and Deonar Dumping Ground Road Junction, is being invited. This flyover consists of 3 + 3 lane having total width of 24.2 m. This will give great relief to traffic jam in Eastern Suburbs. A budget provision of ₹81 crore is proposed in B.E. 2016-17 for this work.

STORM WATER DRAINS

(₹ in crore)

	Budget Estimate 2015-16	Revised Estimate 2015-16	Budget Estimate 2016-17
Revenue Expenditure	328.68	293.90	409.78
Capital Expenditure	1,105.00	667.48	998.70
Total	1,433.68	961.38	1,408.48

Policy changes in SWD drain Works

With a view to improve and make the storm water works efficient and effective, MCGM has simplified the tender process, thereby making the bid process transparent and competitive.

In storm water works, tender conditions have been relaxed to attract more competition. Prominent among these changes are, exclusion of transportation of silt, surplus excavated materials and dewatering from the tender, payment of bills only on the basis of weight alone, revision of logsheet/challan, VTS and weighbridges to be connected to municipal server, assured access allowed for machinery, installation of chowkies at weigh bridges for effective supervision and exclusive supervision by Vigilance Deptt. beyond City limits.

BRIMSTOWAD Project

BRIMSTOWAD Project is being implemented by the Storm Water Deptt. of MCGM in two phases. In Phase-I, 93% works are completed (out of 37.24 km, 34.65 km is completed) and 2.59 km is

balance. In Phase-II, about 75% work is completed (out of 74.07 km, 54.43 km is completed) and 19.64 km is balance. In Phase-I & II, 4 pumping stations (viz. Haji Ali, Irla, Love Grove & Cleaveland) have been completed. Works of Britannia and Gazdharbandh pumping stations (i.e. 2 nos.) are in progress and same are expected to be completed and commissioned by May, 2016. The tenders of Mogra and Mahul pumping stations will be invited within three months.

A provision of ₹233.13 crore has been proposed in B.E. 2016-17 for the Capital works under BRIMSTOWAD.

MCGM has also undertaken works other than **BRIMSTOWAD** for improvement of SWD network. A provision of ₹765.57 **crore** is earmarked in B.E. 2016-17 for the same.

Training and widening of nallas, modification of culverts, construction of collapsed walls and some capital works are proposed through this budget for Eastern and Western Suburbs mainly.

Revision of BRIMSTOWAD Master Plan

As recommended by Fact Finding Committee (FFC), the upgradation of **Master plan** for SWD network has been taken in hand which is likely to be completed by the month of March, 2016. The BASE MAP for the updated Master plan is prepared by carrying out aerial survey using LiDAR software, upto an accuracy level of + 20 CM.

20 works have been identified as important works on the basis of updated Master plan for execution in 2016-17.

Storm Water Pumping Stations

The Pumping Stations at Love Grove and Cleaveland Bunder have been commissioned from June, 2015. The commissioning of Storm Water Pumping Station at Love Grove and Cleaveland Bunder has helped to relieve the flood like situation at areas of Keshavrao Khadye Marg, Dr. Dadasaheb Bhadkamkar Marg, N.M. Joshi Marg to B.D.D. Chawl, Sane Guruji Marg, Dadar Market, Bhavani Shankar Road, Fitwala lane. The existing 55 nos. of chronic flooding spots in the year 2011 have now been reduced to 40.

The works of Britannia and Gazdharbandh Storm Water Pumping Stations are in progress. All efforts are being made to commission the Britannia and Gazdharbandh pumping stations by the end of May, 2016. The Britannia pumping station will help to relieve the flood like situation at Hindmata, Sardar Hotel area, T.B. Kadam Marg, Motisha Lane etc. The Gazdharbandh pumping station will help to relieve the flood like situation at S V Road, Link road, Khar Road, Santacruz areas of Western suburbs.

The land acquisition process for Mogra and Mahul pumping stations is in the process. Tenders will be floated for these pumping stations in next three months.

A provision of ₹153.53 crore has been proposed in the B.E. of 2016-17 for all pumping station works.

Development of Mithi River

The Mithi river under MCGM jurisdiction is being improved for augmentation of its water carriage capacity under the direction of "Mithi River Development and Protection Authority" set up by Govt. of Maharashtra.

Out of total 22 Km. long retaining wall to be constructed along both banks of 11 Km. long Mithi river, the construction of 13.50 Km. long retaining wall is completed by MCGM till 30.11.2015. The retaining wall for the length admeasuring 1.937 Km. (near International Airport) is to be constructed / maintained by MIAA whereas 0.576 Km. length is to be constructed by the private owners/ developers as per remarks issued to the properties affected by river. The tendering process for the work of Mithi river training admeasuring 2.50 Km is in progress.

The balance length of 3.50 Km will be taken for construction of retaining wall near CST Bridge etc. after acquisition of land and removal of encroachments. Concerned Wards have been directed to do the needful in two months, positively.

The deepening and widening of Mithi river works, as recommended by CWPRS appointed by Govt. of Maharashtra, work upto 95% has been completed. Due to which water storage capacity of Mithi river has been doubled and carrying capacity has been increased threefold.

Important works in progress and expected to be completed during the year 2015-16

City

1. P/L 2200 mm dia. SWD pipe line along P.D'Mello Road and Mallet Bunder Road from Jeenabhai Mulji Rathod Marg Junction upto outfall in 'B'Ward.

This work will give relief to minimize flooding in the area of P.D'Mello Road, Jeenabhai Mulji Road. Now, 50% work is completed and 90% of the work will be completed by 31st May, 2016 and remaining 10% work will be completed in next fair season.

2. P/L 1400 mm dia SWD line from Byculla Police Station along Hansraj Lane upto Burhani College in 'E'Ward.

This work will give relief to minimize flooding in the area of Burhani College, Nesbit Road low level area, Mazgaon. Now, 70% of the work is completed and remaining 30% work will be completed by April, 2016. For both the above works, provision of ₹30 crore in R.E. 2015-16 and ₹25 crore in B.E. 2016-17 for City area has been proposed.

Eastern Suburbs

Construction of retaining wall at Adarsh Nagar nalla, Deonar in M/East Ward.

The area of Adarsh Nagar, Shivaji Nagar Road No.13 and 14 will get relief to minimize the flooding. A budget provision of ₹10 crore is proposed in R.E. 2015-16 and ₹15 crore in B.E. 2016-17 for completion of the said work.

Western Suburbs

1. Training and widening of balance part of Irla Nalla between Milan Subway and Chandan Culvert at Andheri (West) in K/West Ward

The area of Milan subway, LIC Colony, JVPD Andheri (West) will be benefitted to minimize the flooding. Now, 10% of the work is completed and remaining 90% work will be completed in the year 2016-17. A budget provision of ₹9 crore in B.E. 2016-17 is made for these works.

2. Improvement of SWD system at Metro Station along Versova-Andheri-Ghatkopar corridor in K/East and K/West Ward.

The area of Metro Station at Western Express Highway, Chakala Junction, Andheri Railway Station area will be benefitted to minimize the flooding. Now, 20% work is completed and balance 80% work will be completed in the year 2016-17. There is a provision of ₹8 crore in R.E. 2015-16 and provision of ₹35 crore in B.E. 2016-17 for these works.

Important works proposed in the year 2016-17 City

1. Augmentation of existing SWD at Seth Motisha Lane (Love Lane) in 'E Ward.

This work will help to mitigate flood like situation at Motisha Lane, Hans Raj Lane, Byculla Police Station area. The consultants are being appointed for preparation of tenders which will be invited by April, 2016. A provision of ₹6 crore is proposed in B.E. 2016-17.

2. Augmentation of storm water drain at Laxmibaug nalla (M.G. road) from Dhobi Ghat upto new outfall at Piwala bungalow, Sant Rohidas Marg, Dharavi, G/North.

This work will help reduce the flood like situation at Mukyadhapak Bhavan and Gurunanak School, Sion (East), Sion circle and Dharavi area at Sion (West) as water will recede fast. The tenders will be invited by March, 2016. A provision of ₹10 crore is proposed in B.E. 2016-17.

Eastern Suburbs

Construction of Nirankari nalla at Shivaji Nagar in M/East Ward.

This work will help to relieve the local flooding at Sant Nirankari Nagar in Shivaji Nagar area. The work will be carried out through Budget Head of Rafi Nagar nalla for which ₹3 crore and ₹14 crore are proposed in R.E. 2015-16 and B.E. 2016-17, respectively for completion of the said work. Tender process for these works is in progress and will be completed in two months.

Western Suburbs

1) Deepening and widening of Nityanand nagar nalla from MSRDC Office to Rangsharada Auditorium in H/W Ward

This work will help to mitigate the flood like situation at Rangsharada Auditorium, MSRDC office, ONGC Colony, Nityanand nagar.

The preparation of tender is in progress and same will be invited by February, 2016.

Budget provision 2016-17 : ₹2 crore

2) Widening of Oshiwara river and construction of retaining walls from S.V. road to Link road in K/W Ward

This work will help to mitigate the flood like situation at Vaishali Nagar, Relief Road, Patel Estate area of Andheri (W).

Budget provision 2016-17: ₹2 crore

3) Widening of Chincholi Nalla along with construction of retaining walls from Baba Singh Nagar to Piramal Nagar Nalla in P/South Ward

This work will help to mitigate the flood like situation at Babasing Nagar, GMLR Link Road, Madina Manzil area, Pavan Baug, Goregaon (East) etc.

Budget provision 2016-17 : ₹2 crore

4) Widening of Oshiwara River and Chincholi Nalla

The procedure of appointment of Consultants for Total Station Survey and Geo-technical Survey is under process. On receipt of these reports, RCC designs will be finalised and tender will be processed in the year 2016-17 before June, 2016.

A budget provision of ₹667.48 crore will be utilised during 2015-16.

A provision of ₹998.70 crore has been proposed in B.E. 2016-17 for Storm Water Drains Capital Works.

HEALTH AND MEDICAL SERVICES

(₹ in crore)

	Budget Estimate 2015-16	Revised Estimate 2015-16	Budget Estimate 2016-17
Revenue Expenditure	2,531.23	2,146.53	2,792.90
Capital Expenditure	794.28	404.89	900.84
Total	3,325.51	2,551.42	3,693.74

The Municipal Corporation of Greater Mumbai has a long history of providing quality health care which includes Primary, Secondary and Tertiary Health care facilities. Some of these Hospitals are 120 years old. Presently the health service is providing health care to 140 lakh patients on OPD basis. The MCGM is the only Corporation in the country running four medical colleges and one dental college including the newly started Hindu Hrudaysamrat Balasaheb Thakre Medical College, at Juhu in September, 2015 with intake capacity of 150 MBBS students. A proposal is also submitted to Government of India to increase the undergraduate student strength of Lokmanya Tilak Medical College from 100 to 150 after obtaining essentiality certificate from Government of Maharashtra. Similarly a proposal to create 138 additional seats for various post graduate courses in LTMC and Sion hospital is also submitted and the MUHS has already accorded in principle approval to 56 seats and further process of submission to Government of India is being pursued.

Some of the super specialty courses such as DM in Pediatric Anesthesia are taught only at KEM Hospital in the country. DM in Neonatology (KEM and Sion Hospital) and DM in Cardiac Anesthesia (KEM Hospital) courses are available only at MCGM in the public sector hospitals in State. Seth GS Medical College and KEM hospital now has a new department of Medical Education which conducts various faculty development courses that are recognized by Medical Council of India.

It is moment of pride for Municipal Corporation that in a recent survey conducted by a national magazine, Seth G.S. Medical College and KEM hospital were ranked best in the western region of India.

State-of-the-Art Virtual E-Class rooms are being established one in each Medical college and Dental college as per recent MCI guidelines. This is the latest technology in audio, video networking, software programs and involve high end PT2 motion sensor detectable – network IP cameras with auto tracking along with voice facility activated microphones in addition to high end audit equipment, advanced audio, video facilities. A provision of ₹7 crore is proposed for Virtual e-classroom in B.E. 2016-17.

In the year 2014-15, around 180,000 patients were admitted as indoor patients and 1.5 lakh major and minor surgeries were performed at major hospitals. As the workload of all the major hospitals is increasing every year, the bed strength of these hospitals needs to be increased to provide service to the patients. In the year 2015-16, administrative approval to increase the bed strength of all the major

hospital is accorded, as a result bed strength of KEM Hospital is increased from 1800 to 2250, Nair Hospital from 1325 to 1800 and Sion Hospital from 1472 to 1900. This additional number of beds and the ever increasing number of OPD would require additional number of faculties. A proposal to create additional 236 posts of faculty is being finalized. Similarly, proposal for creation of additional 1976 posts of nurses is also being finalized in order to strengthen the nursing care across all MCGM hospitals and maternity homes.

The MCGM hospitals are always known for introducing new techniques for diagnostic and operative procedures. Two new cathlabs are commissioned at KEM and Nair hospital and 3 more such labs are in the final stages of procurement for KEM, Sion and Hindu Hrudaysamrat Balasaheb Thakre Medical colleges. Since the number of patients with cardiac and life style diseases is increasing, these machines will provide efficient and quality interventional cardiology services and would be able to reduce the waiting list substantially. At a cost of ₹8 crore each, two new "Digital Subtraction Angiography" (biplanar DSA machines) have been procured for Sion and KEM hospital for peripheral vessel intervention and neuro radiological intervention and will start functioning by March, 2016 These newly installed equipment will help to save lives of many patients with the conservative measures of interventional radiology procedures. KEM hospital has also obtained new 1.5 Tesla MRI machine and installation will be completed by April, 2016 at a cost of ₹8 crore. In 2015, MCGM have also procured Endo-sonography machine and the Stateof-the-Art GI scopy machines for the Gastroenterology department at KEM, Sion and Nair hospitals.

Procedure to procure a modern PET CT Scan machine with 128 slices and all accessories for Nuclear medicine department of KEM hospital is in advance stages at the cost of ₹12 crore and the work of installing the new PET scan will be completed by September, 2016. Ten new modular Operation Theatres at the cost of ₹18.55 crore are also being installed in 3 major hospitals by October, 2016. The Corporation has procured 113 dental chairs which are being installed at Nair Hospital Dental College and other peripheral hospitals by April, 2016.

New Initiatives

Establishment of Thalassemia Treatment Center at Kanakia Complex, Magothane

Thalassemia is the most common gene single disorder in the country. Every year about 1000 children are born with this disorder in Mumbai alone. Such children need lifelong treatment which is very expensive and is ₹2 lakh per year (₹60 lakh per patient for an average life span of 30 to 40 years). Bone marrow transplant which is one time curative treatment cost ₹10 lakh per patient. A 'State-of-the-Art' Comprehensive Thalassemia Care and Bone Marrow Transplantation Centre for prevention, care and cure under one roof is being established in the two storied building available at Magothane, Borivali (E)

The TATA TRUSTS have committed to funding the capital expenditure amounting to ₹6.80 crore for providing Medical

Equipment, Furniture, Fixtures, Electronic items etc. and also the civil and electrical work. This center would have capacity of 20 day care patients every day and 60 bone transplants every year. The center is expected to be functional by June, 2016 and would be under the control of LTMMC and Sion hospital. The treatment would be at subsidized rates and the staffing pattern for this purpose is already approved. A budget provision of ₹4.87 crore is made for this purpose which is included in the overall budget provision of LTMMC.

Multi-disciplinary Clinics

In the year 2014-15, MCGM has started multi-disciplinary clinics such as -

"Stroke Clinics" in KEM, which will help to save patients and minimize their morbidity by initiating the treatment in the golden hour of the stroke. This will help the patient to resume his normal life and recover from illness at earliest.

"Geriatric Clinics" are also started in all major hospitals. "Birth Defect Control Clinics" have been started successfully in KEM and are also proposed to be opened in Sion and Nair hospital.

Due to increasing habit of use of tobacco, Oral and Maxillofacial cancers have shown rising in Mumbai and in India and to curb this health problem, "Oral Cancer Screening Centre" is started at Nair Hospital Dental College. In addition, Geriatric oral health care center has been started.

It is proposed to establish ENT oncology center at Nair hospital

along with radiation therapy. OPD has been established in Sion and Cooper hospital for de-addiction and the existing center at Bhardawadi has been supported further. Emergency Medical Services with 20 ICU beds for surgical intervention and 30 ICU beds for medical intervention is also commissioned at KEM hospital and Surgery Operation Theatres in EMS (KEM) are also commissioned.

Ten Operation Theatres in Nair hospital that were under repairs are completely modernized at a cost of ₹4 crore and commissioned in the month of November, 2015. This has reduced number of waiting list for surgical and allied interventions.

Construction of Hostels for Medical Students

The Medical colleges are providing the residential facilities to MBBS, PG students and also to Residential Doctors as per MCI norms. It is pertinent to note here that few years before, as per the then prevailing policy, students of Bombay University were only admitted in the medical colleges. Subsequently as per the change in the policy, now the students are getting admitted from all over State and also 15% from all India quota for MBBS. This requires additional number of hostel room facilities to such students / RMOs. Keeping this view in mind, it is proposed to construct hostels for all 3 medical colleges in Mumbai City and to fulfill this purpose, the hostel for 1150 UG/PG students is proposed at Acworth campus for KEM hospital, 1048 students at Koliwada for Sion hospital and for 50 students at Haji Ali for Nair hospital. The plans and estimates for all the hostels are also prepared and are at various stages of approval. It is planned that the

tender for this purpose will be invited in the month of March-April, 2016 and the actual work is expected to commence form 15th October, 2016. The total cost of these projects is estimated to be ₹350 crore. An amount of ₹5 crore is provided for this purpose in the budget as a token provision.

The programme of major repairs was approved in the annual budget of 2015-16. The major structural repair works of KEM (multi storied building), Sion (old OPD building and nurses quarters) and to main building of Nair Dental College are already in progress and it is expected to be completed in financial year 2016-17.

Peripheral Hospitals

The Secondary healthcare hospitals in the periphery are also providing health care facilities including surgeries and medicine specialties and in the year 2014-15, the peripheral hospitals performed around 40,000 major and minor surgeries and provided service to about 60 lakhs OPD patients. At present, these hospitals are headed by the Medical Superintendent and assisted by Medical officers whose qualification is MBBS. The specialist Doctors are either on honorary or on contract basis. However, it is necessary to provide qualified post graduate medical officers in view of the speciality services provided in these hospitals in order to improve the services. A proposal to create 283 posts of Post Graduate Medical Officers, 70 posts of Casualty Medical Officers, 78 Registrars, 290 Senior Residents and 109 House Officers on regular basis is being finalized. These posts are proposed to be filled in over a period of 3 years.

The dialysis services are provided in Public Private Partnership in 5 hospitals. However, with the change in the lifestyle, there is increasing need to provide more such centers. It is, therefore, proposed to establish 2 more centers at V.N. Desai Hospital, Dr. D.M. Mehta Hospital. The tenders for PPP partners would be invited by end of February, 2016 and work shall be awarded by June, 2016, so that, center would be actually commissioned by December, 2016.

A building for Nurses Training College within the campus of Bhagwati hospital is complete and 100 bedded new medicine ward is being commissioned in the said building in the month of April, 2016. The plans and estimates for M.T. Agarwal Hospital, Mulund, Pt. Madan Mohan Malviya Shatabdi Hospital, Govandi and H. Bhagwati, Borivali Phase-II are complete and are at various stages of approval and the tenders for the same are proposed to be invited in the month of March, 2016, so that, actual work can be taken up in October, 2016. The work of construction of Kasturba Cross Road Hospital, Borivali is planned to be restarted by May, 2016. The tender for extention to Nair Dental College building is invited and expected to be finalised by May, 2016. The estimated cost of these 5 works is about ₹1,080 crore and a budget provision of ₹31.86 crore is made in B.E. 2016-17.

New Projects to be undertaken in 2016-17

Human Milk Bank is proposed to be established at Rajawadi and Bharat Ratna Dr. Babasaheb Ambedkar Hospitals. These banks would be made functional by July, 2016.

Strengthening of ENT and Ophthalmology departments - It is proposed to strengthen these departments at Rajawadi, Bharat Ratna Dr. Babasaheb Ambedkar Hospital, K.B. Bhabha Hospital, Bandra, V.N. Desai Hospital, Santacruz and Pt. Madan Mohan Hospital Govandi by providing modern equipment for eye and ear surgeries, for which provision is included in overall budget estimate of peripheral hospitals.

Primary Health Care

Primary Health Care of MCGM has 173 dispensaries and 183 Health Post. During the year 2015, 41,04,483 patients were provided health care from these centers. 29 maternity homes carried out 15,252 deliveries in the same year which are 20% of total MCGM deliveries.

In order to create awareness about general health and hygiene, 83 camps were conducted during 2015 at various places in all 24 wards and 34,532 patients were attended at the camps. These camps were very effective in prevention and control of vector and water borne diseases.

It is pertinent to note that as a result of camps and overall campaign of MCGM coupled with mitigation measures of vector control by PCO, the incidences of Malaria have come down from 10,565 cases in 2013-14 to 7517 cases in 2015. These programmes are proposed to be continued in the year 2016-17.

According to World Health Organization (WHO) 2015 report, the numbers of TB cases are increasing in India and in metro cities. In Mumbai danger of spreading TB is very high due to dense population,

overcrowding and housing conditions compared to thin population areas. MCGM had already taken initiative to create awareness for TB through "TB Harega Desh Jitega" campaign with a film featuring Mr. Amitabh Bachchan as brand ambassador and this film was telecast on channels and it proved to be very effective for creating awareness on early diagnosis and treatment. This campaign along with film is now adopted by Government of India Central TB division at national level.

Efforts of MCGM are even recognized by WHO and many other international agencies. **Mumbai TB Care** Model and Mumbai Mission for TB control was discussed at World TB conference in South Africa in 2015.

Gene Expert machines play very important role in diagnosing MDR TB and enable physicians to treat patients according to drug sensitivity pattern and thus help administering proper treatment to patients. In the year 2015-16, 8 such machines were operational and it is proposed to increase to 22 by end of 2016-17 for which financial assistance is provided by the central TB division.

MCGM also collaborated with Bill and Melinda Gates foundation and initiated e-voucher schemes under which patients visiting private sector are given benefit at subsidized rates for TB diagnosis as well as free treatment. Presently 17,000 patients have already received free vouchers and every month 1,500 TB patients are added to the list. This would help in preventing transmission of TB infections by such patients which otherwise would have remained untreated in private sector due to high cost.

Bedaquiline is a new drug proposed to be introduced this year in February, 2016 for the treatment for XDRTB (extreme drug resistant TB) for which Govt. of India has selected 6 centers in the country including Sewree TB hospital as one of the centers. This expensive drug will be provided free of cost from Govt. of India under Conditional Access Programme (CAP) and MCGM has to provide infrastructure and manpower for the said project which has budget of approximately ₹1.25 crore. Similarly, it is proposed to upgrade MCGM labs to diagnose and do culture sensitivity tests at Municipal medical colleges and Sewree TB hospital for which a budget of ₹35 lakhs is proposed in overall budget provision of public health.

The Corporation runs 1200 bedded Sewree TB hospital for treatment of TB patients. Major repairs costing ₹10 crore are undertaken in 2015-16 and said work is expected to be completed by end of 2016.

As per Rindani Committee guidelines for every 50,000 population, 1 dispensary is to be created. Accordingly, Corporation needs 89 more dispensaries in addition to existing 173 dispensaries. These centers are proposed to be started in 2016-17 depending on availability of premises. However, 10 such centers will be opened up to June, 2016. These centers will work during morning and evening hours.

Govt. of India under NUHM (National Urban Health Mission) has proposed to start Urban PHCS, in Mumbai, 118 such centers are proposed and ₹28 crore is provided through NUHM. Out of that, 13 UPHC will start immediately. Out of 89 centers which are funded by

MCGM whichever is possible will be converted to UPHC so as to get the benefit of the scheme.

With change in the lifestyle diseases such as Diabetes, Hypertension, Cancer, Heart diseases, Kidney diseases and respiratory diseases are emerging and need early treatment and diagnosis facilities. In order to provide these services, it is proposed to open **Polyclinics on DAYCARE basis** with payment chargeable at the subsidized rates from the patients for the services from consultant and lab investigations at subsidized rate. One such center is proposed at Punjabi Galli, Borivali. The work of design and drawing is completed and actual work is expected to begin in October, 2016 and the budget provision of ₹2.50 crore is already proposed.

MCGM is implementing Diabetes and Hypertension Control programme since 2012 which is now functioning in all 173 dispensaries. It is proposed to continue Diabetes Control programme in the year 2016-17 and undertake awareness campaign on the lifestyle changes and focus on dietary advices and YOGA etc. through counseling services. A budget provision of ₹50 lakh is proposed in overall budget provision of public health services.

Nutrition Programme

The prevalence of malnutrition is 47% in the slums of Mumbai higher than many states in the country. The MCGM in partnership with the Women and Child department and Sneha, a NGO, has signed a tripartite agreement to tackle the severe problem of malnutrition in the

city by working together in the communities, identifying cases of malnutrition, treating them with medical nutrition therapy. The MCGM will provide Nutrition Rehabilitation Centres, WCD will provide services through anganwadis and SNEHA will be responsible for training, coordination of all community work and monitoring of all activities. Initially, the work will start in three areas viz. Mankhurd, (Govandi), Dharavi and Malwani where the malnutrition rates are very high where Sneha has been working for the last three years together with MCGM and ICDS. They have brought down the percentage of malnutrition to a considerable extent in certain areas that they have worked.

Hygiene and Cleanliness in Major and Peripheral Hospitals

The patient care needs to be supplemented by quality sanitation facilities. Keeping this view in mind, the medical intensive care unit of KEM hospital is outsourced to a private agency for cleaning activities. Looking at the encouraging experience of this initiative, it has been decided to outsource the cleaning and sanitation activities in major and peripheral hospitals and the actual implementation is expected in April, 2016.

Recovery of Service Charges

It is pertinent to mention here that MCGM has provided ₹2,792.90 crore for revenue budget of health care system and ₹900.84 crore for health infrastructure in the year 2016-17. The revenue receipts from health care charges are ₹248.86 crore i.e. about 6.74% of the total

spending on health care facilities. The service charges for health care were determined in the year 2000 and over the past 15 years, there is substantial increase in the cost of services. Although it is accepted fact that it would not be prudent to recover the service charges proportionate to the actual expenditure, it has become necessary to increase these charges. About 45% of the total patients treated by the MCGM health care are the residents of areas other than MCGM. The Corporation may also think of applying separate fee structure for such patients.

EDUCATION

(₹ in crore)

	Budget	Revised	Budget
	Estimates	Estimates	Estimates
	2015-16	2015-16	2016-17
Revenue Expenditure	2,143.75	1,730.51	2,069.53
Capital Expenditure	357.14	231.52	324.57
Total	2,500.89	1,962.03	2,394.10

The Budget Estimates for the year 2016-17 of the Education Department is ₹2,394.10 crore. The important Schemes of the ensuing Budget Estimate are as follows:-

1: TAB facility to Std. VIII student

With the view to develop learning capacity among the MCGM school students and to reduce the weight of school bags and raise the quality of education, 22,799 TAB with Std.VIII syllabus is distributed

by MCGM to Std. VIII students and teachers in the academic year 2015-16.

These TAB will be carried forward by students for 9th Std. in which syllabus for 9th Std. will be incorporated. Students of primary and secondary school entering 8th Std. academic year 2016-17 will be given new TABs.

Budget provision (Primary) ₹10.06 crore Budget provision (Secondary) ₹4.31 crore

2: Hygienic Toilets in Municipal School Buildings

Modern hygienic toilets in MCGM schools will be constructed in repairs, up-gradation or reconstruction of schools. As per R.T.E. Act 2009 norms and also under Swachh Bharat Abhiyan municipal school buildings have sufficient toilet but wherever there are repairs required, new hygienic and modern toilets to the students will be provided.

Budget provision ₹10 crore

3: Establishing Computer Laboratories

Tender process to set up new 126 computer labs in the year 2015-16 is under process. Simirlaly, 67 further computer labs for primary and 69 computer labs for secondary section will be established in the ensuing year 2016-17. In this way the municipal schools having 50 and more than students on roll will henceforth have computer labs.

Budget provision (Primary) ₹8.71 crore Budget provision (Secondary) ₹8.97 crore

4: Science Lab

MCGM schools without science laboratory (required as per syllabus) will be provided with science laboratory. In 102 primary and 58 MPS cum secondary schools science lab will be provided.

Science laboratories are available in primary section (Std. VI to Std. VIII based on science syllabus). Through science labs teachers inculcate the following skills amongst the students.

- 1) Explain the scientific concepts
- 2) Growth in scientific attitude
- 3) Handling of science apparatus / things.
- 4) Derive conclusion through actual experiments, etc.

Budget provision (Primary) ₹9 crore

Budget provision (Secondary) ₹6 crore

5: Toy Library for Balwadi

MCGM runs 504 Balwadis with the help of NGOs. From this year, toy library is to be set up with a view to attract students towards education and develop confidence into them. It is also proposed to paint one of the walls of balwadi classes with natural scenery, trees, animals, birds, etc.

Budget provision ₹1.76 crore

69

6: Vocational Training

With the purpose to increase vocationalization and education of students studying in VIII, IX and X Std., thus leading to better career selection by students and achivement of goal, it is proposed to impart guidance to students and arrange visits to various instutions for first hand experience.

Budget provision (Primary) ₹1.50 crore Budget provision (Secondary) ₹2.00 crore

7: Library Books & Cupboards

Education department is running 6 libraries for teachers in different wards. Similarly, each primary / secondary school have library facility for students as well as teachers. To nourish the culture of reading books, modern and science subject books, animal life, informative books on forts in State history, picture books literature, etc. will be provided to these libraries.

New 115 cupboards will be provided for 115 new secondary schools for library books in the year 2016-17.

Budget provision (Books) ₹2.07 crore Budget provision (Cupboards) ₹30 lakh

8: Distribution of Educational Materials

With a view to provide educational materials such as uniform, shoes, etc. at the very beginning of academic year to students, purchase order for the year 2016-17 has been issued in January itself and it has been made mandatory for contractors to make stocks available for

inspection in April-May 2016, so that supply of educational materials can be assured in June 2016.

Budget provision (Primary) ₹88.17 crore

Budget provision (Secondary) ₹15 crore

9: Sister Schools

In order to enhance educational quality of municipal schools as well as their students, Education department has undertaken an innovative scheme titled as "Sister Schools". Under this scheme, expert teachers from the reputed neighbouring private schools, will dedicate 2 hours per week to guide the MCGM students especially in the subjects like Science, English, Mathematics, Foreign Languages, etc. This scheme is being implemented initialy on experimental basis in selected municipal schools, in all wards of Eastern suburbs.

10 : M.O.U.

7 NGOs (Non Government Organisation) run 22 municipal schools, through their teaching and non-teaching staff, funded at their own. Education department is finalizing the process of executing M.O.U. with these NGOs. In future, this scheme will be implemented in other wards also.

11: Online School Recognition

Uptill now private aided / unaided schools situated in MCGM jurisdiction, are given recognition and renewal / extension of recognition manually. Since 2016-17, this process will be implemented

through online system for the purpose of uniformity & transparency in the workings.

12: Effective inspection of MCGM schools

For the enhancement of educational facilities and educational qualities of MCGM schools, objective of frequent effective inspection through school visit is set. The objective is to conserve the educational quality and standard of MCGM students.

13: Office Tables & Chairs

In order to ensure adequate basic facilities in the municipal school buildings as well as in educational offices, MCGM has decided to purchase 1,125 office tables and 1,314 office chairs for teachers and other staff in the ensuing year.

Budget provision (Primary) ₹1.60 crore

INTEGRATED SLUM IMPROVEMENT PROGRAMME

MCGM has undertaken Integrated Slum Improvement Programme. A provision of ₹10 crore was made for this programme in 2015-16. As the slum improvement is our priority, the said provision is increased to ₹100 crore in B.E. 2016-17. This provision will be utilized for improvement of slums in timebound manner.

SOLID WASTE MANAGEMENT

(₹ in crore)

	Budget	Revised	Budget
	Estimates	Estimates	Estimates
	2015-16	2015-16	2016-17
Revenue Expenditure	1,800.94	1,651.07	2,159.77
Capital Expenditure	378.66	137.72	352.45
Total	2,179.60	1,788.79	2512.22

Swachh Mumbai – Swachh Bharat Abhiyan

MCGM, being the principal agency for maintaining sanitation in the city, has taken key responsibility of implementation of "Swachh Bharat Abhiyan" in Mumbai. Under this mission, a grant of ₹8.31 crore is received from Government till December, 2015. This fund is to be utilized for construction of individual toilets, public toilets, public awareness and capacity building/training of staff.

Salient features of Swachh Mumbai – Swachh Bharat Abhiyan

- 1) To make open defecation free city by encouraging construction of individual toilets.
- Construction of community toilets at places where construction of individual toilets is not feasible due to space constraint.

- 3) Construction of Pay and Use toilets for floating population.
- 4) Proper solid waste management and 100% processing of waste.
- 5) Public awareness to achieve above targets.
- 6) Capacity building training to officers and employees to accomplish all above targets.

Open defecation spots have been identified at 117 spots all over Mumbai. Ward-wise action plan is prepared to eliminate open defecation at such places by providing individual toilets and community toilets. Corporation will deposit directly to the beneficiary's bank account; a grant of ₹4,000/- received from Central Government and ₹1,000/- received from State Government, Corporation has proposed to give ₹2,000/- to all the eligible beneficiaries of individual toilets. Considering poor response to the construction of individual toilets due to severe space constraints, Corporation will put more emphasis on construction of community toilets. Accordingly, a provision of ₹75 crore is proposed for construction of community toilets in B.E. 2016-17. Thus in this budget, highest ever budget provision is made for construction of additional 3,340 seats of community toilets under SSP, toilets for women and individual toilets.

New Pay & Use toilets with 1070 seats are planned at public roads for floating population especially under flyovers and with no obstruction to the traffic. For this, it is proposed to seek help under Corporate Social Responsibility (CSR). As it is difficult for the operator

to meet the operating expenses of these "Pay and Use" toilets and hence to facilitate the provision of well-maintained toilets to citizens without increasing the user charges, it is proposed to provide "Viability Gap Funding" (VGF) from Corporation to the operators of "Pay & Use" as well as "Community" Toilet. To meet these expenses, a budget provision of ₹12 crore is proposed in B.E 2016-17. A special drive will be taken up to improve cleanliness around stations which are crowded. Steps will be taken to ensure facilitation for pedestrians and keeping the area around stations encroachment free. The agencies for construction of public toilets on Eastern and Western Express Highway have been appointed. The work is expected to start soon.

Further, a provision of ₹75 crore is also made for undertaking repairs to toilet blocks and ensuring that basic utilities like water and electricity are available in all existing community toilet blocks constructed under different schemes by government agencies.

In the year 2016-17; it is targeted to construct 1,070 new toilet seats in addition to the existing 13,722 seats under 'Pay & Use' Toilets. Further, it is targeted to construct 3,340 new toilet seats in addition to the existing 79,757 seats under Community Toilets. In addition to these, Individual Household Toilets are being provided at ward level wherever feasible. To improve the level of services being offered to citizens; Show Cause Notices are being issued to defaulting Toilet Operators whose performance is unsatisfactory and new tenders are also being invited for construction of exclusive Ladies

Toilets. A budget provision of ₹5 crore is proposed for construction of various ladies, automatic toilets along highway in B.E. 2016-17.

In a major administrative change, the execution and construction of Community Toilets is assigned to Ward officials. Further, the process of selection and appointment of Toilet Operators is being decentralised at ward/zone level to achieve the targets. The Assistant Commissioners (Ward) are empowered to provide sewer lines for the length upto 30 mtrs. in slum for connecting household toilets in consultation with Sewerage department.

Public awareness

With a view to improve the level of public awareness, campaigns for enhancing civic sense through large scale display of banners / hoardings on roads, by performing street plays, broadcasting cleanliness massages on radio, direct communication with citizens through social media like Facebook, Twitter etc., conducting competitive program amongst school children regarding cleanliness, conducting cleanliness programs in various offices and establishments and promotion of all such activities will be launched. For these works, in addition to the government aid, ₹15 crore provision is proposed in B.E. 2016-17.

Planning of Solid Waste Management

In Mumbai, around 9600 MT of waste is generated and the work of collection and transportation towards dumping ground is carried out on daily basis. Also all public roads in Mumbai are swept daily.

The main components of Solid Waste Management are as follows:-

Waste Segregation

The work of waste segregation is carried out in dry waste segregation sheds erected in all 24 wards. Separate vehicles are provided in each ward for house to house collection of segregated dry waste. Also agency is being appointed for wardwise collection and scientific disposal of the e-waste generated from electronic items. The first e-waste collection center has been started in K/West ward and during next year, it is targeted to start the e-waste centers in balance 23 wards. For all these works, a provision of ₹6 crore is proposed in B.E. 2016-17.

Projects for green waste (tree trimmings and leaves) are in operation on Public-Private-Partnership (PPP) model for converting 16 MT of green waste into green coal. On similar lines, operators are being appointed for separate collection and processing of plastic waste by inviting 'Expression of Interest'.

Waste Collection

Closed bins and closed refuse vehicles are being used for waste collection. In Mumbai, 4 transfer stations are in operation. Daily cleanliness of Chowpatties and Eastern and Western Highways, roads in BKC area, Eastern freeway and Santacruz-Chembur-Link-Road

(SCLR) is maintained by deploying sufficient manpower and machinery. In coming year, it is proposed to carry out daily sweeping of major roads by Mechanical Power Sweeping.

Open dumps of garbage will be eliminated in 2016-17 by providing adequate number of refuse bins at these spots and by improving House-to-House refuse collection services. Further, around 2,000 litter bins will be provided in 2016-17 to prevent littering on roads and public places.

Stringent directives have been given to Assistant Commissioners to reduce the waste collection centres on roads through collection of waste from house to house.

Stationary Compactors

As a part of process of elimination of community bins, it is proposed to install stationary compactors of capacity 15 MT at 20 new places and procure 20 large compactors in the coming year. For this, a provision of ₹16.50 crore is proposed in B.E. 2016-17.

Swachh Mumbai Prabodhan Abhiyan (Vasti Swachhata Yojana)

A provision of ₹80.89 crore is proposed for "Swachh Mumbai Prabodhan Abhiyan" in B.E. 2016-17.

A budget provision of ₹32 crore is proposed for 'Manning & Mopping' in B.E. 2016-17.

The proposal of starting scheme of 'Clean-up-Marshal' is under consideration for implementation of "Greater Mumbai Cleanliness and Sanitation Bye-laws -2006".

Mega Waste Processing Projects

In 2015, the work of waste processing has commenced at Kanjur bio-reactor waste processing facility of approx. 3,000 TPD capacity. The project of composting wet waste in an enclosure at Kanjur shall start in 2016. The process of gas generation at Kanjur waste processing project has started and it is expected that operator will start work of waste to energy project this year. We have already floated tenders for scientific closure and recovery of land of the Mulund Dumping Ground and expect work to start in 2016-17. We have also floated tenders for appointment of a consultant for establishing a 2,000 TPD capacity Waste to Energy project at Deonar and expect to start that work also.

In the meantime, modern facilities such as compound wall, lighting, CCTV cameras, higher security, roads will be provided at Deonar and Mulund Dumping Ground in the year 2016-17.

We have been successful in persuading GoM in allotting fresh land for new waste processing projects. Possession of 38 hectare land at Village Karvalle, Taluka Ambarnath, District Thane has been taken. As regards land at Mumbai-Airoli, Collector Mumbai Suburban District has ordered for taking possession of said land by MCGM after joint

measurement of the land. We propose to develop World Class Waste Processing Centres either on Mulund-Airoli site or at Taloja. We also propose to set up a debris to sand processing center at one of these sites. Tender for appointment of consultants for the above projects shall be called for soon and we shall finalize the project plan in 2016-17 and also start the work.

Budget provision .. ₹28 crore

Ashray Yojana

Under Ashray Yojana, 28000 nos. of quarters at 39 locations are to be provided through redevelopment of existing land by using upto 4 FSI. The work of redevelopment at Cochin Street has started and in 2016-17, redevelopment work will commence at 7 places and transit camps are constructed at 2 locations and will also be constructed at additional 10 places. A provision of ₹67.05 crore is proposed for construction of transit camps, major repairs and redevelopment of Solid Waste Management residential staff quarters in B.E. 2016-17.

Earmarking 25% provision for SWM and Sewage Water Projects out of total provision for Capital Works.

The provisions of Section 41(2)A Water (Pollution Prevention and Control) Act, 1974 and Section 15 Environment (Protection) Act, 1986 as well as Municipal Solid Waste (Management & Handling) Rules, 2000 mandate to earmark 25% of the total provision made for

Capital Works for the projects under Solid Waste Management and Sewage Water as informed by the Member Secretary, Maharashtra Pollution Control Board (MPCB).

In view of these directives, in the B.E. 2016-17 ₹3,348.64 crore i.e.26.03% have been earmarked for the projects as given below:-

Activity	Provision
	(₹ in crore)
Solid Waste Management	352.45
Storm Water Drain	998.70
Roads (25% provision for SWD)	951.70
Goregaon-Mulund-Link-Road (7%)	9.10
Sewage Water	189.88
Sewerage Projects	198.43
Municipal Sewerage Disposal Project	648.38
Total	3,348.64
Total Capital Provision	
Budget A, B & E	10,303.47
Budget G	2,559.31
Total Capital Provision	12,862.78
% of capital provision for the project S.W.M., S.W.D., S.P. etc. over total capital expenditure	26.03

LICENCE DEPARTMENT

Action against unauthorized hoardings

In pursuance of Hon'ble High Court's orders dated 30.07.2012, efforts have been made to remove the hoardings which are violating the new policy guidelines and accordingly 537 unauthorized hoardings are removed.

Pursuant to the Hon'ble Bombay High Court orders dated 26.11.2015, 'Unauthorised Banners and Boards Removal Programme' is undertaken and legal action is also initiated against such display in order to make Banner less Mumbai and Clean Mumbai.

Licence Department issues the licences under Section 394, 328 / 328A, 313 (i) (b) (c) of MMC Act 1888. The procedure to obtain these licences has been simplified and same has been displayed on MCGM portal site.

Street Vendors Regulation

In order to abide by the Hon'ble Supreme Court directions given from time to time and as per the provisions of the Street Vendors (Protection of Livelihood and Regulation of Street Vending) Act, 2014, software is being developed to regulate the business of street vending. As per directions of Hon'ble High Court, Mumbai, the action against food vendors engaged in cooking on streets is initiated on day-to-day basis. For convenience of the citizens at large, in all 24 wards, one road each is kept street vendor free.

GARDENS

(₹ in crore)

	Budget	Revised	Budget
	Estimates	Estimates	Estimates
	2015-16	2015-16	2016-17
Revenue Expenditure	144.28	128.18	188.03
Capital Expenditure	340.59	300.33	312.20
Total	484.87	428.51	500.23

Development of Garden/RG/PG Plots

Playgrounds need to be given greater thrust for children and adults alike. Accordingly, MCGM is emphasising more on the development of playgrounds so as to encourage games such as Kabaddi, Kho-Kho, Cricket, Football, Basketball, Volleyball. These facilities are proposed in 150 playgrounds in the year 2016-17. Facility of Jogging Track is also proposed on these playgrounds. Assistant Commissioners have been directed to beautify road dividers through sponsors or from municipal funds. A budget provision of ₹77.44 crore has been made for these works and playgrounds in B.E. 2016-17.

Total 30 no. gardens are proposed to be developed in 2016-17. Out of which, 2 no. of gardens in **City zones**, 17 in **Eastern Suburbs**

and 11 in **Western Suburbs**. A budget provision of ₹46.53 crore has been made for these gardens in B.E. 2016-17.

Work of following Theme Parks is completed by Garden Cell:-

Sr. No.	Name of Garden (Ward)	Theme
1.	Bombay Dyeing Plot (F/S)	Sanyukt Maharashtra movement memorial garden)
2.	Priyadarshani Garden (L)	Fortresses of Maharashtra
3.	Hegadewar Udyan (N)	Phases of Moon
4.	S. K. Patil Udyan (C)	Butterfly Garden
5.	Upper Govind Nagar (P/S)	Rose Garden

- The work of Nakshtra Udyan in Andheri (West) will be completed by February, 2016.
- The beautification works of Bandra Talao and Kalina Tank will also be completed by February, 2016.

The following important works are in progress viz., Shilpagram Udyan, (Jogeshwari East), CTIRC Garden Borivali, Annabhau Sathe Smruti Garden, Chembur, Rani Laxmibai Udyan, Sion and are expected to be completed by June, 2016.

Development of following gardens and playgrounds are proposed in the year 2016-17

1) Energy Park, Kandivali – Energy type sources, wind energy, solar energy themes and their use.

- 2) Football Ground Near D Mart, Malad Football Ground
- 3) Purandare Stadium, Naigaon, Dadar Upgradation of stadium
- 4) Traffic Park, Ghatkopar Model of traffic concepts for children.

Out of 62 Gardens which were proposed to be developed in 2015-16, development works of 28 gardens are completed. Some of the prominent gardens are -

Mumbadevi Garden, C Ward, Sant Dyaneshawar Maidan, Goregaon (W), Aai Ekveeradevi Udyan, Goregaon (W), Chhatrapati Shahu Maharaj Kridangan, M/E and Dharmaveer Sambhaji Maidan, S ward.

Development of remaining gardens will be completed by March 2016.

Band Stand - Band Stand at Shri Tulsidas Kilachand Garden at Marine Drive has been renovated and now on every Friday and Saturday Band is performed there, after a gap of three decades.

Tree Census –Till today, the GPS based tree census of 23,15,072 No. of trees has been completed. Total work will be completed in next four months.

Administrative reforms in Garden Maintenance

Assistant Supdt. of Garden will act as co-ordinator for beautification, upgradation and for all the development and maintenance works of gardens/PG/RG between Assistant Commissioners of the Wards and Garden Department.

In view of adoption of gardens, whose terms have ended, are being taken back by MCGM, Garden Deptt. A provision of ₹75 crore is made for maintenance in the year 2016-17.

A lumpsum budget provision of ₹12 crore is proposed in B.E. 2016-17 for maintenance/ repairs of gardens at ward level.

MODERNISATION OF VEERMATA JIJABAI BHOSALE UDYAN & ZOO

As per the suggestions received from the Central Zoo Authority, New Delhi and as per an order dated 18.07.2005 of Hon'ble High Court, Mumbai in the Writ Petition PIL No.2825/2004, the MCGM administration has taken up a project of modernization and complete revamping of this Zoo. The Technical Committee of Central Zoo Authority, New Delhi has accorded the final approval to the Master (Layout) Plan on 05-12-2012.

However, the development / renovation of Zoo could not be taken up due to approval pending from Mumbai Heritage Conservation Committee (MHCC). But I am happy to note that the said approval has now been received and the Zoo will be renovated as recommended by Central Zoo Authority (CZA), New Delhi and MHCC.

1. Completed works -

 Zoo Hospital building, Heritage Restoration works, Zoo Interpretation Centre building, Peripheral Wall, Asphalting of internal roads

2. Ongoing works -

- Animal enclosure In the first phase, tenders for construction of 5 animal enclosures viz. Jackal, Wolf, Otter, Sloth Bear and Madras Pond Turtle have been invited and these works will be completed in the year 2016-17.
- Entrance Plaza The agency to renovate the Entrance Plaza has been finalized and the work will be started during current financial year.
- Penguins The tenders for the interior works of Penguin Exhibit and Cafeteria have been floated. This work will be completed during 2016-17. The agency for procurement of Humboldt Penguin 6 Nos. has been finalised and the said birds will be procured by the zoo in August, 2016.

Proposed development works for 2016-17

1. Development of Animal Enclosures

 Construction of animal exhibits for Hyena, Tiger Swamp deer, Barking deer, Sambar, Nilgai, Four horned antelope & Black buck, Cat complex, Leopard, Bird Aviary 1 & 2, Lion, Muggar & Ghariyal, Reptile house – Preparation of tender documents in progress and the work order will be issued in May, 2016.

2. Preparation of Master Plan for Mafatlal Mill area

 Appointment of consultant for the preparation of Master Plan is under progress and the same will be finalised by March, 2016.

3. Development of Bird Park at Dr. Babasaheb Ambedkar Udyan, Powai

 Appointment of PMC consultant is already done vide SCR No.933 dated10-12-2014.

The budget provision of ₹100 crore is proposed for the year 2016-17.

ESTATE DEPARTMENT

Simplification of the procedure for providing service and facilities to citizens.

Pursuant to MCGM Policy regarding simplification of working procedure in various departments for rendering services and facilities speedily to the citizens of Mumbai, Estate Department has simplified procedures related to various NOCs being issued by Estate department as below:-

1) NOC/Annexure-II to be issued to SRA for Slum Rehabilitation Projects.

The earlier tedious policy circular dated 16.05.2012 is squashed and new simplified policy circular dated 10.09.2015 is issued which has key time saving changes as below:-

- i) Earlier 12 documents were required to process NOC which are now reduced to only 5 documents.
- Demarcation from City Survey was earlier insisted along with the proposal. Now demarcation plan and plot area certification is done by architect.

- iii) No dues pending certificate of Water department and Assessment department were required to be submitted by developer earlier before processing NOC. These certificates are now directly to be obtained by concerned Asst. Commissioner of Ward before issuance of Annexure –II.
- iv) Approval of Technical Committee of 10 members required earlier is now cancelled and the direct approval of DMC (Imp.) and A.M.C. (E.S.) is now insisted.

2) NOCs for MCGM's Leasehold Plots.

The procedures for granting various NOCs for redevelopment of leasehold properties, transfer of leasehold rights, sub leasing of lease properties, attornment of V.L.T.'s transfer of tenancies, renewal of lease etc. are simplified by calling suggestions and objections from citizens/Lessees/ Architect/developers which has key time saving changes as below.

- Application form for each NOC itself now indicates the minimum required documents and the prescribed fee schedule.
- ii) For processing each NOC, a time limit to be taken by each concerned officer is prescribed and thus brings fixed time limit for granting each NOC.
- iii) Due to the simplification procedure, the redevelopment process will be speeded up and revenue to MCGM will be increased.

Project Affected Persons (PAP)

Since 1991, PAP tenements for Project Affected Persons are being received by Estate department for allotment to the project affected persons of various projects.

Out of 23,265 nos. of total PAP residential tenements, 17,012 are allotted to various PAPs and balance 6,253 will be allotted to PAPs of various projects i.e. Tansa Pipeline, BRIMSTOWAD Project, Roads, Bridges And Dilapidated Buildings.

For overcoming scarcity of commercial PAP, available PAPs on ground floor tenements will be allotted to the Commercial PAPs.

MUMBAI FIRE BRIGADE

(₹ in crore)

	Budget	Revised	Budget
	Estimates	Estimates	Estimates
	2015-16	2015-16	2016-17
Revenue Expenditure	224.02	147.86	257.77
Capital Expenditure	247.27	141.59	323.81
Total	471.29	289.45	581.58

Mumbai Fire Brigade established in the year 1887 is one of the oldest fire brigade in the country. Mumbai Fire Brigade is known for its professionalism and efficiency in not only in fire fighting but also in rescue operation.

Mumbai Fire Brigade has already responded to the natural and

manmade calamities even outside MCGM area including other states in the country. Over the years, the Mumbai Fire Brigade has identified itself as one of the most efficient fire fighting and rescue services in the country.

During the year 2014-15, 59 officers and men of Mumbai Fire Brigade have been awarded 63 Silver medals for the Extraordinary Bravery for the duty performed at various incidences beyond the call of their normal duties. Also 9 officers and men are awarded with President's Gallantry Medal for Fire Service for the exemplary work done at Nilkamal Lotus Business Park, Andheri (W).

I salute the brave men and officers who laid down their lives fighting the Kalbadevi Fire.

During the year 2015-16, four officers of Mumbai Fire Brigade laid down their lives in the line of duty. It is commendable to note that the Mumbai Fire Brigade were able to rescue all the trapped people at Kalbadevi Fire successfully. However the incidence of fire at Gokul Niwas, Kalbadevi has led the Mumbai Fire Brigade to revamp the entire department so as to avoid any loss of its brave men in future and also to efficiently discharge their service in saving life and property.

Keeping this objective in view, the Mumbai Fire Brigade has taken initiative in addressing all the recommendations made by the Fact Finding Committee appointed after Kalbadevi Fire.

Some of the main features are enumerated as below:-

• Health check up of all the Jawans and Officers of Mumbai Fire

Brigade have been completed and the treatment wherever necessary is initiated.

- In order to bring in discipline and efficiency into the force,
 regular parade and drills have been restarted.
- In order to enhance the preparedness and efficiency of the Jawans and Officers, Annual drill competition have been started from 2015 and being made regular and annual feature.
- Standard Operating Procedure (SOP) manual is prepared for working of Mumbai Fire Brigade during fire fighting and rescue operation in order to fix roll and responsibilities of each and every Fire Brigade personnel and also defined the role and responsibility of other supporting agencies such as ward authority, police, disaster Management cell and other stake holders.
- 90 mtrs. Hydraulic platform is inducted and commissioned in Fire Brigade on 16.08.2015.
- The work of erecting breathing apparatus gallery is already started at Wadala Training Centre. This facility will enhance the professional skill of Fireman while working in actual smoke filled situation. Budget of ₹2.68 crore is proposed in B.E. 2016-17.
- 16 new fire engines at the cost of ₹16.65 crore in replacement of old outdated fire engines are received and same will be inducted in the Mumbai Fire Brigade shortly. These fire engines are

fitted with state-of-the-art system which will enhance the delivery levels of Mumbai Fire Brigade.

- The command centres at Borivali, Vikhroli and Byculla are partially started and the services to the citizens are started to provide from these command centres. These will be completed by December, 2016 and a budget of ₹10.94 crore is proposed in B.E. 2016-17.
- The fire station at Mankhurd is started in March, 2015 and the Command Centre will be started shortly.
- The renovation of Gawalia Tank Fire Station is completed and started the activities from the new fire station building from July, 2015. The new fire station building is equipped with turn table ladder and water bouser in addition to fire engine. This will definitely enhance the fire safety in the crowded area of south Mumbai.
- State-of-the-art Breathing Apparatus Vans 6 numbers with BA air compressor are received and commissioned at various fire stations.
- The beach safety equipments such as rescue boats, Jetski, ring buoys, life jackets etc. are received and commissioned at six selected beaches.

During the year 2016-17, a budgetary allocation of ₹246.45 crore is proposed for the procurement of plant and machinery for which the procedure of inviting the tenders is already started.

- Fabrication and supply of fire engines 8 nos. in replacement of old fire engines.
- Fabrication and supply of fire engine 6 nos. with accessories.
- Fabrication and supply of water tanker of 14 KL capacity 11 nos. in replacement of old water tankers.
- Fabrication and supply of Foam Tender 3 nos.
- Fabrication and supply of control post vans 3 nos.
- Fabrication and supply of mini mobile mini fire engine with piercing system – 3 nos.
- Fabrication and supply of 81 mtrs. Hydraulic Platform (LOI issued).
- Supply of Gymnasium equipments.

In order to provide maximum safety to the firemen on duty, it has been decided to provide Personal Protective Equipment (PPE) including fire resistance uniform for which the tenders are already invited and the actual supply of this uniform would be made in B.E. 2016-17 for which an amount of ₹46.75 crore is proposed.

A proposal is made for early response vehicle having greater maneuverability for early commutation in the narrow lanes and slum areas in Mumbai. A tender is under process for the procurement of 17 Quick Response Multipurpose Vehicles. These vehicles are expected to be delivered in 2016-17 for which a provision of ₹31.96 crore is proposed.

In order to enhance the existing fire fighting and rescue services, it is proposed to procure three 68 mtrs. turn table ladders one each for city, western suburban & eastern suburban. The turn table ladders are better manoeuvrable, fast in rescue operation. A budget provision of ₹32 crore is proposed in B.E. 2016-17.

During the manmade or natural calamities, early response is the most important factor in order to approach the site in minimum possible time. The Mumbai Fire Brigade presently depends on the manual system and individual judgment. This system will be replaced with faster and more reliable system called "Integrated Command & Control System with GPS and GIS based automatic vehicle tracking system and distress call response management system – dial 101". In view of this, Mumbai Fire Brigade has already obtained expert opinion from IIT Bombay and based on their recommendations, the RFP is invited from the successful bidders those who have submitted the EOI document and presented POC successfully. The system would be fully functional in the Financial Year 2016-17, for which a budgetary provision of ₹65 crore is proposed.

The reliable communication is a backbone of emergency department and hence the present VHF communication system of Mumbai Fire Brigade will be replaced with new digital mobile radio system for which a budgetary provision of ₹8.50 crore is proposed in B.E. 2016-17.

Under Maharashtra Fire Prevention & Life Safety Measures Act 2006, it is necessary to provide proper Fire Safety in every building. For this purpose, regular inspections of the buildings are being carried out by the nominated officers of Mumbai Fire Brigade and if any violation or in contravention of provision of this Act is seen, necessary action is being taken. An appeal is published in various newspapers and on MCGM website to carry out regular fire safety audit of their buildings and necessary Form B shall be submitted to Mumbai Fire Brigade at regular intervals.

With the ever increasing population of Mumbai city and infrastructure, it is necessary to expand the Mumbai Fire Brigade to deal with the new challenges. The process of creating additional posts of officers and men are under finalization. However, a programme of creating fire volunteers is started from August, 2015 and more than 500 Volunteers are trained from various localities. It is proposed to create a strong volunteer force of more than 6000 under six regional command centres.

Mumbai, being a financial capital of this country, people from all walks of life are coming to this city in search of livelihood. In the last decade, there is tremendous growth in infrastructure such as high rise buildings, malls, multiplexes etc. putting enormous challenges before Mumbai Fire Brigade.

Modernization is ever evolving process and Mumbai Fire Brigade has always been on forefront in terms of modernization of its fire fighting and rescue equipment as well as training of its manpower so that they become capable of performing their duties in a Metropolis.

MUNICIPAL MARKETS

(₹ in crore)

	Budget	Revised	Budget
	Estimates	Estimates	Estimates
	2015-16	2015-16	2016-17
Revenue Expenditure	67.46	57.00	71.07
Capital Expenditure	37.46	27.41	74.16
Total	104.92	84.41	145.23

As per section 61(h) of MMC Act, 1888, it is mandatory responsibility of the Corporation to provide market facility for selling of various kinds of goods including grocery, vegetable, meat, etc. The Corporation have 92 Municipal markets and 91 accommodation reservation markets. 18 Municipal markets are undertaken for development, out of which 4 markets are completed and 14 are in progress.

During the year 2013, the Corporation passed the modified policy of redevelopment of market on Ready Reckoner basis. As per existing policy, 12 markets are being developed by various market associations as per Hon'ble High Court's directions. Remaining

25 markets and 6 open plots are now being developed departmentally under DCR 33(21) It is expected that civil work of 6 such markets will be started in 2016.

The major repair works of 15 markets have been undertaken by Building Maintenance Department and minor repair work of 18 markets is undertaken by respective Ward offices. A budget provision of ₹28.89 crore is proposed for this purpose.

BUILDING MAINTENANCE

The Building Maintenance Department established in the year 2013-14 is entrusted with the responsibility of major and structural repairs to the Municipal buildings including tenanted buildings. During the year 2015-16, 133 proposals for major /structural repairs amounting to ₹974.33 crore have been given administrative approval. Tenders are invited for 110 works amounting to ₹791 crore. The major works undertaken by Building Maintenance include 377 Nos. of staff quarters / tenanted buildings belonging to various departments such as SWM, Estates, CFO, and Market. Also few major projects such as modernization of Byculla Zoo and turnkey project for more than 2,000 Nos. of staff quarters have been taken up by BM department.

It is expected that in the year 2016-17, 115 works would be completed. A budget provision of ₹680 crore is provided for this purpose.

DEONAR ABATTOIR

(₹ in crore)

	Budget	Revised	Budget
	Estimates 2015-16	Estimates 2015-16	Estimates 2016-17
Revenue Expenditure	41.78	34.45	49.63
Capital Expenditure	15.60	4.56	88.32
Total	57.38	39.01	137.95

Modernisation of Deonar Abattoir

As per Section 61(h) of MMC Act 1888, it is responsibility of the Corporation to provide for supply of fresh meat for consumption of citizens. The present capacity of Deonar Abattoir is 6,000 sheeps/goats per day per shift. After modernization, it will be possible to run the Abattoir in 2 or 3 shifts and present capacity will be increased by 2/3 times. The consultant is appointed to prepare the master plan for modernization of Deonar Abattoir. The report of consultant is expected by the month of June, 2016 and further action will be taken after receipt of said report. A provision of ₹85 crore is proposed in B.E. 2016-17.

CITY ENGINEER DEPARTMENT

The City Engineer is entrusted with the responsibility of construction of new buildings of various departments under MCGM. Presently new construction works of 14 buildings are undergoing and 7 Nos. of building are expected to be completed in the year 2016.

Prominent works are as under:-

- 1) The Historical Crawford Market Building is being developed in two phases. The first phase is of restoration of the old building including the Market section. The restoration work of main building is almost completed and it has obtained its original glory. The phase two consists of construction of market building with two level basements for passenger and commercial vehicles with gross built up area of 31550 Sq. mtrs. including basement. The market and office space is designed as (G+3) with an area of 18,072 sq.mtr. The drawings and design have been approved by the Heritage Committee and it is planned to invite tender in the month of March / April 2016 so that civil works could start in the month of October, 2016. The total cost would be ₹150 crore. A lumpsum provision has been made in the overall budget.
- 2) The Shivaji Market located at Palton Road is declared as dilapidated and the demolition work of all the floors above ground floor is being undertaken. The ground floor which is presently occupied as fish market would be shifted to Mahatma Jyotiba Phule Market new building on completion and subsequently market and administrative building to house MCGM offices would be constructed on the said plot. The work of planning, drawings and design for the said project is planned in the year 2016-17 so that further process can be started immediately after shifting of fish market to new building of Mahatma Jyotiba Phule Market.
- 3) The work of new ward offices building of H/West and P/North

is being undertaken in the year 2016-17 at an estimated cost of ₹36 crore and ₹51 crore respectively and provision of ₹5 crore and ₹10 crore respectively is proposed in B.E. 2016-17.

MECHANICAL & ELECTRICAL DEPARTMENT

Lighting of all heritage structures of MCGM

The Head office of Municipal Corporation of Greater Mumbai located just opposite to Chatrapati Shivaji Terminus is a world renowned heritage building. Chatrapati Shivaji Terminus building has been beautifully illuminated with decorative lights. On these lines, it is proposed to illuminate the Municipal Head Office with decorative lights to enhance its beauty at night. For this, a budget provision of ₹10 crore has been proposed in the B.E. 2016-17.

Arrangement of flood light in Shahaji Raje Krida Sankul:

Arrangement of flood light in Shahaji Raje Krida Sankul is proposed in view of proposed FIFA Matches scheduled during 1st week of March, 2016. The work is already started and necessary budget provision of ₹2 crore is proposed in B.E. 2016-17.

Lighting arrangements at beaches e.g. Juhu Beach

The project of providing decorative lighting at all beaches is proposed to be undertaken starting with Juhu beach.

For this, the budget provision of ₹20 crore is proposed in the B.E. 2016-17.

CONSERVATION / RESTORATION OF HERITAGE STRUCTURES, HISTORICAL FOUNTAIN AND STATUES.

There are in all 16 MCGM owned heritage structures in 'A' Ward. It is proposed to restore the heritage structures through PPP and MCGM funds. MCGM will take up restoration of 8 structures through MCGM funds. Some of them are restoration of Municipal Head Office - Main Building, Mahatma Phule Market, Flora Fountain, ENT Hospital. 3 structures will be restored through PPP. The Heritage Conservation Committee has approved all the proposals. A provision of ₹5 crore is proposed for conservation / restoration of heritage structure, historical fountain and statues.

PLANNING

Gender Budget

In the current financial year, the provision of gender budget is ₹22 crore. This entire provision will be utilised during this financial year as against 59 % budget utilisation in the previous year.

National Urban Livelihood Mission (NULM)

Govt. of India has launched Employment Skill Development Training Programme (ESTP). In the City of Mumbai, 34,000 eligible beneficiaries will be provided the training under this programme. MCGM has been given the target to provide 34,000 beneficiaries for

the ESTP MCGM has achieved this target and uptill now 240 batches and 7,200 beneficiaries are being trained at various locations in Mumbai through the vocational training providers.

I am glad to state that the target given to MCGM is highest in Maharashtra and it is achieved.

Night Shelters

MCGM is committed to provide 25 night shelters in the City of Mumbai. Uptill now 7 night shelters have been established and another 7 night shelters will be started within a month. MCGM plans to achieve the target of providing 25 night shelters in near future. P.I.L. filed by Homeless Collective is being heard by Hon'ble Mumbai High Court and in the previous two hearings, the Hon'ble High Court has appreciated the performance of MCGM. A budget provision of ₹3 crore has been proposed for the same.

Initiatives for Senior Citizens

In the present year, the initiatives for Senior Citizens undertaken are celebrations of Senior Citizens Day, 50% travel concessions to Women Senior Citizen and handicapped women in BEST passes. Eight Recreation Centres for Senior Citizens will be started before March, 2016. Recreation Centre will have television, Carrom Boards, newspapers, magazines, table, chair and cupboard. A budget provision of ₹25 lakh is proposed in B.E. 2016-17 for the various activities for Senior Citizens.

Self Help Groups

During the current year, 7,500 women beneficiaries belonging to Self Help Groups will be provided basic skill training. The training will be completed before end of current financial year.

Revolving fund to Self Help Groups

The target of the current financial year will be achieved. Revolving fund of ₹10,000/- per group is distributed to the eligible S.H.G. A provision of ₹2 crore is proposed in B.E. 2016-17.

Self Employment Scheme

Under the scheme, machineries are provided to the poor and needy women. During the current financial year, machineries worth ₹9.3 crore will be distributed to the 8,399 eligible women beneficiaries. A budget provision of ₹5 crore is proposed in B.E.2016-17. Last year 3,609 machineries were distributed to the beneficiaries at the cost of ₹3.56 crore.

Self employment to handicapped women

Handicapped women will be provided with flour mills so that they can earn their livelihood. During the current financial year, 2043 flour mills will be distributed to the eligible handicapped women. A provision of ₹3 crore is proposed in B.E. 2016-17.

Exhibitions of the products of Self Help Groups

The S.H.Gs. produce lot of quality products. However, S.H.Gs. find difficulty in marketing their products. In order to help them, MCGM has organised exhibitions. These exhibitions were organised in all 24 Wards during the festival of Diwali and 3 major exhibitions are planned during the month of February, 2016. There was very good response from the customers for the products of S.H.Gs. The S.H.Gs. have also participated in Mahalaxmi Saras Exhibition and Kala Ghoda festival. The products of the S.H.Gs. have done brisk business and S.H.Gs were very happy that they got the opportunity to showcase their products.

125th Birth Anniversary of Bharatratna Dr. Babasaheb Ambedkar, Mahaparinirvan Din and Annabhau Sathe Jayanti

To celebrate 125th birth anniversary of Bharatratna Dr.Babasaheb Ambedkar, an enhanced provision of ₹1 crore has been proposed in the Budget Estimates for 2016-17, which will be utilized for publishing "Coffee Table Book" on Dr. B.R. Ambedkar and other activities. Similarly, a provision of ₹2 crore has been proposed in the B.E. 2016-17 for Mahaparinirvan Din as against the provision of ₹1.50 crore in B.E. 2015-16 which will be utilized for providing various civic amenities to the visiting Anuyayis.

In the Budget Estimates for 2016-17, provisions of ₹10 lakh for celebration of Annabhau Sathe Jayanti and ₹5 lakh for celebration of Sant Rohidas Jayanti have been proposed.

Integrated Litigation Management Solution (ILMS) for pending legal cases.

With a view to providing a single platform to manage all pending legal cases information which are in the range of 50,000 to 80,000, it has been decided to implement Integrated Litigation Management Solution (ILMS). With this, MCGM will have an intelligent and systematic management of the cases to enable real time reporting analytic and eventual adding current system.

Accordingly, the present status is that Tender Notice has been floated on MCGM portal to submit the bids from 15th January to 10th February, 2016. We expect to finalise the bids and make the system operational in 2016-17.

A budget provision of ₹10 crore is proposed in B.E. 2016-17 for this project.

Redevelopment of Rifle club of Maharashtra Rifle Association, Worli,

The MCGM had allotted a plot located at C.S. No. 220 (pt) of Worli estate, Scheme 53, Abdul Gafar Khan Road, Worli admeasuring 5016.34 sq.mtr. on lease of 40 years on 17.04.1986 to Maharashtra Rifle Association (MRA). The MRA has established rifle club at this site and is one of the very few clubs of its kind in the city. The MRA presently provides preliminary shooting range with 10 mtr., 25 mtr, 50 mtr. ranges. Over the years, it has lent its facilities to many aspiring shooters, some of which, have excelled to be able to perform

at National and International competitions. Though fully functional, the facilities presently provided by the club, now need an upgrade. While keeping the shooting ranges as the preliminary function, the club need to be developed as World Class rifle club fitted with all the latest equipments and technology, so as to provide World Class shooting facilities.

In order to achieve these objectives, the MCGM has discussed this matter with MRA to explore the possibility to develop this club to provide world class facilities for rifle shooting. The proposed club facilities will not only include the state-of-the-art rifle club, but will also provide other necessary facilities. The MCGM plans to partner the development of this rifle club. This initiative of MCGM, however, would need amendment in the Articles of Association, Memorandum of Association of MRA and also modifications in the lease terms to make them more wide based and inclusive. The proposal of the club along with draft MOU and Articles of Association of MCGM would be placed before the Corporation for approval. A budget of ₹2 crore is proposed for this year.

Incentive to municipal employees

To support the national campaign of "Beti Bachao Beti Padhao" announced by Govt. of India, it is proposed to start a scheme for municipal employees towards the welfare of the girl child. A provision of ₹10 lakh is proposed in B.E. 2016-17 for this purpose.

Now I shall present the 'G' Budget.

Size of Budget 'G', Fund Code 40

Revenue and Capital Receipts of ₹5887.74 crore and Revenue and Capital Expenditure of ₹5887.11 crore is proposed in the Budget Estimates 2016-17. The comparison with Estimates for 2015-16 is given below:

(₹ in crore)

Particulars	B.E.	R.E.	B.E.
	2015-16	2015-16	2016-17
Sources			
Anticipated Revenue	4170.71	4319.42	4622.52
Development Charges	143.75	156.75	156.75
Contribution towards diversion of water/sewer lines	10.00	10.00	10.00
Withdrawal from Reserves	1465.72	177.22	1098.47
Total Sources (Budget Size) (A)	5790.18	4663.39	5887.74
Applications			
Revenue Expenditure	3246.91	3084.47	3327.80
Capital Expenditure	2542.73	1578.56	2559.31
Total Applications (B)	5789.64	4663.03	5887.11
Surplus/ Deficit (A-B)	0.54	0.36	0.63

Financial Status of Budget 'G'

The projected population of Mumbai is expected to be 17.43 million and projected water demand is 5940 MLD by the year 2041. The increase in population of Mumbai results in increase in water demand. To meet the increasing gap between demand and supply of water, the measures to save water has been implemented. It is also decided to develop the Gargai, Pinjal and Damanganga-Pinjal River Link Projects as a new water source in a phased manner to meet additional water demand. The estimated cost of these projects is ₹1,820 crore, ₹14,390 crore and ₹2,747 crore respectively (as per 2012 SR).

Similarly, to improve the sewerage facilities along with water supply projects, it is proposed to undertake the Mumbai Sewage Disposal Project, Phase-II (Priority Works, Components-II, III & IV) costing ₹10,600 crore.

In addition, MCGM will require huge funds to meet the capital expenditure of ongoing projects and operation & maintenance expenditure of the projects already completed. Therefore, the cost cutting measures are being implemented to reduce the expenditure. Special emphasis on time bound tendering and execution.

Revenue Income Sources

(₹ in crore)

Description	Budget Estimates		
	2015-16	2015-16	2016-17
Water Tax	203.80	203.80	224.18
Water Benefit Tax	881.63	881.63	969.79
Sewerage Tax	365.65	365.65	402.22
Sewerage Benefit Tax	545.97	545.97	600.57
Total Tax (A)	1997.05	1997.05	2196.76
Water Charges	805.15	742.54	772.98
Sewerage Charges	491.64	453.38	471.36
Total Charges (B)	1296.79	1195.92	1244.34
Other Revenue (C)	876.87	1126.45	1181.42
Total Revenue (A+B+C)	4170.71	4319.42	4622.52

The facilities like NEFT, RTGS, Cyber CFC, Mobile Apps,
Payment Gateway through MCGM Website have already been
introduced for convenience of consumers for the payment of water
& sewerage charges/taxes bills. Similarly, the facilities of
intimation of water charges bills on mobile phone and water

charges bills on e-mail of the consumers are also made available. For this purpose Mobile numbers of 1,80,374 and E-mail ids of 53,567 consumers are registered so far.

WATER SUPPLY

(₹ in crore)

Ward	Revenue	Capital	Total
	Exp.	Exp.	
Water Supply Project	34.29	608.92	643.21
Hydraulic Engineer	1770.14	891.93	2662.07

Mumbai gets 4070 MLD water supply mainly from 7 sources viz. from Tulsi, Vihar & Tansa Lake and from Modak Sagar, Middle Vaitarna, Upper Vaitarna and Bhatsa Dam. Net supply to Mumbai is 3760 MLD (excluding en-route supply and transmission losses). This year due to less rainfall in catchment area, a 15% cut in the quantity of daily water supply has been implemented from 28th August,2015. The available water as on 1st Oct.2015 as compared to 1st Oct.2014 was short by 2,63,546 ML. Hence we have planned to use the available water stock (including utilization of 50% Reserved Stock) upto 31st July 2016. Let us hope that the ensuing monsoon will have satisfactory rains and all the dams will be full of water and Mumbai will get sufficient and regular water supply.

Population Projection, Demand and Augmentation of Water Supply

The population of Mumbai is increasing continuously. The projected population of Mumbai is 17.43 million by the year 2041. The projected water demand for 2041 is 5940 MLD (including enroute supply and transmission losses). The shortfall in Demand and Supply will be 2520 MLD by 2041(Presuming 650 MLD Bhatsa water temporarily allocated to be surrendered to GoM).

The gap will be met by developing the Gargai (440 MLD), Pinjal (865 MLD) and Damanganga-Pinjal River Link Project (1586 MLD) water supply sources allocated to Mumbai by the Government.

On completion of these project, the water supply will be augmented by 2891 MLD and the total water supply to Mumbai will be 6311 MLD.

Gargai Project

The Gargai Dam project is the next project to be taken up for augmentation of additional 440 MLD water to the existing water supply for improving of water supply to the City with the full utilization of the already constructed conveyance system.

During the year 2015-16 MCGM has received permission to carry out survey and geotechnical investigation from National Board of Wild Life (NBWL) in May 2015. The initial proposal regarding R & R package for 770 affected people of 190 families has been submitted to Collector, Palghar for further processing. A Gramsabha was held on 15th August 2015 with people of affected villages, who in turn

conveyed their in-principal approval subject to some of their demands. The final draft report for Environmental Impact Assessment has been received from the consultant NEERI.

The work of carrying out demarcation of submergence area of 855 Hectares and demographic survey of affected people is in progress and is likely to be completed by March, 2016. The process for appointing new consultant for preparing DPR and obtaining requisite approvals from GoI and GoM is in progress.

During 2016-17, it is envisaged to obtain final EIA report, Bio-diversity report and DPR copy from respective consultant and the process to obtain the requisite approval from competent authorities would be initiated. Also after finalization of DPR, Central Designs Organization (CDO) would be appointed for obtaining detailed design and drawings for the project in accordance to GR of GoM.

Budget provision 2016-17 – ₹0.40 crore

Pinjal Project

The bio-diversity survey is in progress, will be completed by March 2016. Environmental Impact Assessment survey is in progress, to be completed in 2016-17. Tender will be invited for appointment of consultant for feasibility studies. Tender will be invited for appointing agency to carry out work of demarcation of submergence area and demographic survey. The rehabilitation and resettlement plan will be prepared in 2016-17.

Budget provision 2016-17 – ₹ 0.40 crore

Damanganga-Pinjal River Link Project

Modified DPR is submitted to Central Water Commission(CWC) by National Water Development Authority (NWDA). Demographic survey, submergence survey, tree survey is carried out by NWDA. Rehabilitation and Resettlement (R & R) plan, land acquisition, MoEF clearance will be pursued with Collector of Palghar, Collector of Nashik and Forest Department in the year 2016-17.

Water Supply Tunnels

Raw water is brought from the source to the Bhandup Complex treatment plant in the City through the network of Water Mains viz. Vaitarna, Upper Vaitarna, Tansa East and Tansa West. These Water Mains have been carrying water to the City since long. These Water Mains are 50 to 90 years old. Thickness of these pipelines has reduced due to wear and tear, thereby causing frequent bursts, hence it is necessary to replace such age old and dilapidated pipelines.

The water supply network inside the city is also old. The various development in the city and also encroachment, have laid to burial of water pipeline below roads of infrastructure constructed at various locations.

Due to old and dilapidated water pipelines there have been frequent occurrences of pipeline bursts, leakages, leading to frequent repairs/emergency to be undertaken. Sometimes it becomes difficult even to approach such buried pipelines in case of repairs.

Considering all the above facts, MCGM has undertaken various tunnel projects. MCGM is the first Public body in India to undertake the tunnel projects with the use of Tunnel Boring Machine (TBM) in 1983. Till date more than 67 km long tunnels have been completed and commissioned. About 22 km long tunnel are currently under progress and Around 124 km long tunnels (15 km in City area and about 109 km in Outside City area) are proposed to be undertaken in the future for augmentation of the water supply to Mumbai.

Benefits of Tunnels over the surface pipelines:

- Tunnels are designed as earthquake resistant structures and have a life of 100 years, leading to minimum operation and maintenance cost.
- Tunnels begin 60 to 100 meter deep below ground avoid losses due to thefts, leakages, thus playing a major role in reducing the percentage of Non Revenue Water (NRW) and helps reduction in contamination and also do not require expenses on account of land acquisition and rehabilitation.
- Also the tunnels operate on gravitational flow thus do not require additional cost for pumping of water.
- Mumbai being densely populated and having heavy road traffic, also

has a large network of underground utilities which makes it extremely difficult to lay new watermains of large diameters by open trench method. Hence, construction of tunnels for water supply is the best available option to avoid inconvenience to the public and commuters.

Current Status of Tunnel works

• The work of connecting the existing water mains to the Maroshi to Ruparel College Tunnel via Vakola and Mahim of 3000 mm dia and 12.25 km long has been completed and commissioned. This tunnel has helped in improving the pressure of water supply in G-North, G-South, H-East wards and in areas adjoining Worli and Pali Hill wards. This tunnel has improved the water supply to old buildings which does not have underground suction water tanks and requires direct supply of water to higher floors. This tunnel was also necessary to discard the old trunk mains passing through Airport.

Budget provision 2016-17 – ₹0.50 crore

 Gundavali to Kapurbawdi and Kapurbawdi to Bhandup Complex tunnels are 5500 mm dia and total 15.1 km long. Tunnel boring and RCC lining work is completed. Both the tunnels are expected to be commissioned by June 2016.

The tunnel has a capacity to convey 4000 MLD water, which includes provisions for existing supply and supply from proposed Gargai and Pinjal dam projects. These tunnels will replace and offer

an alternative to the age old Tansa, Vaitarna mains which are 50 to 90 years old.

Budget provision 2016-17 – ₹90 crore

• Powai to Veravali and Powai to Ghatkopar tunnels of 2200 mm dia. and total 6.6 km long are in progress. The boring work of 2.2 km long tunnel from Powai to Veravali is completed and lining of the same is in progress. Due to adverse geological strata encountered in the tunnel boring work in Powai to Ghatkopar, the boring work by TBM could not be continued. After soil investigations study in the affected zone and as recommended by consultants the TBM machine has been lowered inside the tunnel and the work is restarted. The said tunnels are expected to be commissioned by May 2018. These tunnels will strengthen and increase the capacity to convey water supply to Ghatkopar High Level, Ghatkopar Low level and Veravali Hill reservoirs in a phased wise manner, as per availability of water, thereby improving the water supply to K/East, K/West, H/East, N and L wards.

Budget provision 2016-17 – ₹40 crore

• The proposed Chembur to Parel Tunnel is approximately 9.7 km long. BEST proposed to construct new building on the proposed shaft location at Anik Depot. Hence, the earlier location of shaft was changed. Accordingly, the surveys and feasibility study etc. have changed. Revised survey and feasibility study are in progress. The

tenders will be immediately invited after completion of above works in the coming financial year. This tunnel will replace age old surface of underground pipelines thereby providing a capacity to cater to the increased water demand of the increasing population due to new developments in F/North, F/South and parts of E ward till the year 2061.

Budget provision 2016-17 – ₹85 crore

• The proposed tunnel from Chembur to Trombay Reservoir is approximately 5.5 km long. BARC has given permission for survey works in their premises in Sept. 2015. The consultant has taken up various Survey works, Feasibility Study and Draft tender preparation etc. After completion of the said work Report will be submitted to BARC and after the receipt of their permission for construction of tunnel, the tender will be invited immediately. We expect this work to start in the coming financial year. This tunnel will replace age old underground pipelines thereby providing a capacity to cater to the water demand of the population in M/ East and M/west wards upto year 2061.

Budget provision 2016-17 – ₹53 crore

Inspection and Condition survey of Old Tunnel

 It is proposed to conduct Inspection and Condition Assessment survey of the existing transmission tunnel of 2950 mm dia from Modak Sagar to Bifurcation Chamber to Bell nallah. As this tunnel has been in continuous operation for about 60 years. It was not possible to inspect the tunnel until now. However, as the new tunnel between Modak Sagar (Intake Tower) to Bel Nallah has been operational, the inspection to assess the present condition of the tunnel shall be carried out to take the further remedial measures.

Budget provision 2016-17 - ₹4.75 crore

Repair and Reconstruction of Reservoirs

- The existing service reservoirs at Bhandup and Worli were over 40 years old and hence reconstruction of Reservoir is undertaken. The old reservoir at Bhandup Hill Reservoir of capacity 15.14 M.L. is demolished and new reservoir is commissioned in January 2015. Reconstruction of Worli Hill Reservoir having capacity of 21.25 M.L. is commissioned in October 2015. This has helped in maintaining the reservoir level and reservoir capacity is adequate to cater the need of future demands.
- The Master Balancing Reservoir at Bhandup Complex and Yewai Master Balancing Reservoir in outside city are commissioned in 1979 and 1995 respectively. The work of Structural Repairs of both above Master Balancing Reservoirs along with other service reservoirs in City, Western Suburbs and Eastern suburbs are proposed as a new work in 2016-17.

Budget provision 2016-17 – ₹11.50 crore

Re-engineering of Treatment Plant

 Re-engineering work of 90 MLD Vihar Water Treatment Plant is under-taken. This age old water treatment plant required to be reconstructed due to its dilapidated condition. The work will start by March 2016 and shall be completed within 40 months.

Budget provision 2016-17 – ₹21 crore

New Water Mains for Improvement of Water Supply

• The work of laying pipelines from tunnel shaft to water treatment plant and proposed Break Pressure Tower (BPT) at Bhandup Complex is in progress and likely to be completed by December 2016. The pipelines shall carry water from the shaft at Bhandup Complex of the tunnel from Gundvali to Bhandup Complex to the water treatment plant and convey the overflow of water to Vihar Lake. After completion of Gundvali-Bhandup complex tunnel and this work, the new 900 MLD capacity Water Treatment Plant shall be utilized to its full capacity.

Budget provision 2016-17 – ₹50 crore

• The work order is given for laying of 1200 mm dia., 2 km long and 900 mm dia.,1 km long water main at Veera Desai Road from the tunnel shaft at Adarsh Nagar. This pipeline work would help in improving water supply in Gilbert Hill, Amboli, etc. areas in K/West ward from where complaints are received. This work is expected to be completed by May 2017.

Budget provision 2016-17 – ₹18 crore

As adequate size of water mains are not available to cater the need
of water for proposed Sangharsh Nagar Phase II and surrounding
area in L Ward, laying of 900 mm dia. new water main of 1.1 km
long from IIT outlet along Manubhai Road upto Chandivali Farm
Road is proposed and expected to commence in October 2016 and
shall be completed by January 2018.

Budget provision 2016-17 - ₹3 crore

• Two rising mains exists from III-A pumping station to injection point at Yewai, for injection of raw water from Bhatsa to Vaitarna system. Only one main exists below NH-3. It is proposed to provide 2235 mm dia additional water main across NH-3, with pipe jacking and pushing technology. After commissioning of Gundavali Bhandup complex tunnel and this work, It will be possible to increase raw water injection capacity upto 640 MLD in Vaitarna System.

Budget provision 2016-17 – ₹8 crore

• It is proposed to carry out the work of interconnection of the purified water sump of stage-I, stage-II & stage-III at Panjrapur Pumping Station. This will facilitate maintenance of pumps without reducing treated water supply from Panjrapur Pumping Station.

Budget provision 2016-17 - ₹0.60 crore

Rehabilitation and Replacement of Water Supply Network Primary Network

The Tansa mains are the pipelines through which water is conveyed to the city under high pressure. These water mains are about 90 years old and have corroded at various places, resulting in frequent leakages. The city faces a water cut during the repair works of these lines. Hence it has now been decided to either replace the pipelines or provide tunnels as an alternative to strengthen the water supply system.

 1800 mm dia "Twin Tansa Mains" between Chinchvali (ARVC) to Yewai by providing single 3000 mm dia main with flow control valves at ARVC.

Budget provision 2016-17 - ₹55 Crore

 1800 mm dia Tansa (East) & Tansa (West) mains from Balkum to Mulund, each 6.6 km long, are being rehabilitated by providing single 3000 mm dia main from Balkum to Saddle tunnel.

Budget provision 2016-17 - ₹65 Crore

• Vaitarna and Upper Vaitarna water mains are in continuous operation since 1958 and 1974 respectively. Hence strengthening works of these mains could not be undertaken in the past. Now due to availability of Middle Vaitarna water pipeline and since Gundavali Bhandup complex tunnel likely to be commissioned in June 2016, the work of strengthening of pipe line by providing

Internal Cement Mortar-lining to Upper Vaitarna from Aghai to Gundavali (44 kms.) and Gundavali to Saddle Tunnel (18 kms.) and to Vaitarna main from Yewai to Gundavali (11 kms.) and Gundavali to Saddle Tunnel (18 kms.) is proposed in 2016-17.

Budget provision 2016-17 – ₹33 crore

Secondary Network

• Tansa (East) & Tansa (West) mains from Bhandup Anchor Block to Powai are being replaced in phased manner. Under Phase-I, the work of laying 2400 mm dia., 2.5 km long water main from Bhandup Anchor Block to IIT subway is in progress, out of which 1.10 km. length work has been completed. Under Phase-II, the work of laying 2400 mm dia, 2 km long water main from IIT subway to Powai is in progress and shall be completed by January 2017.

Budget Provision for 2016-17 - ₹45 crore.

• 1200 mm dia Tansa mains and 800 mm dia Vihar main on Dr. Babasaheb Ambedkar Road, from King's Circle to Kala Chowky have gone below embankment of series of road bridges on this road and have became inaccessible for repairs and maintenance works. Those mains are proposed to be replaced by laying a 1500 mm dia new water main. The work will be executed in a phased manner. Under Phase-I, the work from Deodhar Road junction to Hindmata Cinema is in progress. 1.50 km is completed out of 2.20 km. Under

Phase-II, the tenders for the work of laying 2.30 km. water mains from Hindmata Cinema to Sane Guruji Road have been invited.

Budget Provision for 2016-17 - ₹40 crore.

• The 1500 mm dia, 4.12 km long water main of Bhandarwada Hill Reservoir Arm from R.A. Kidwai Marg, Rey Road to Jerbai Wadia, Sewree is in progress and 2 km. works have completed. The balance work is expected to be completed by May 2017. Also The work of laying of 900 mm dia 0.70 km long water main from R.A. Kidwai Marg from Futka Tank to Sion Hospital is commenced from January 2016 and will be completed by December 2017.

The portion between Jerbai Wadia, Sewree to Futka Tank of 1500 mm dia and 3.15 km length is proposed in 2016-17. On completion of the said work, the occurrences of bursts of old pipeline will be eliminated thereby saving the wastage of water.

Budget Provision for 2016-17 - ₹25 crore.

• The tender for the work of replacement 1500 mm dia 0.42 km long water main of Bhandarwada Hill Reservoir Arm tapped from 2750 mm dia Upper Vaitarna Trunk main upto Temkar Chowk, 60 ft. road is invited. This work is expected to be commenced in March 2016. On completion of this work, the water supply at proposed Dharavi Redevelopment Project, Prem Nagar, Naik Nagar, PMGP Colony will be improved.

Budget Provision for 2016-17 - ₹4 crore

• The inlet water main to Veravali reservoir I in K/E ward being old has lead to frequent bursts, hence replacement with 1200 mm dia. 2.6 km water main is proposed. This will help in regularized water supply to Veravali reservoir and will improve water supply to K/E and K/W ward.

Budget provision 2016-17 - ₹5 crore

Tertiary Network

 1200 mm dia Vileparle outlet and 1200 mm dia Versova outlet being old and in dilapidated condition, develop leakages frequently. It is proposed to lay a 1500 mm dia, 2.15 km and 1200 mm, dia 0.55 km MS water main from RamyaJivan Society, Andheri (E) to GPL Cigarate Factory along Mahakali Caves Rd. in K/E ward

Budget provision 2016-17 - ₹8 crore

• Existing 1200 mm dia water main near Dnyaneshwar Nagar near Mithi River in H/E Bandra ward being old and in dilapidated condition which proposed to be replaced. Also 600 mm dia. 0.10km long Bus Bar in Control Room on road leading to Pali Hill reservoir in H/W ward, is old and in dilapidated condition which is proposed to be replaced by a 1200 mm watermain.

Budget provision 2016-17 - ₹1 crore

 As the existing 1200 mm dia water main known as old Charkop outlet on new link road Kandivali (West) R/South is old and has gone 8- 10 m deep below the road making it difficult for repairs and maintenance. Hence, needs replacement. This new 2.2 km water main will help in maintaining normal water supply on areas on link road in R- South ward.

Budget provision 2016-17 - ₹6 crore

 Existing 900 mm dia.0.70 km water main on Patel Estate Road from Railway Compound to S.V. Road K/West ward is old and corroded leading to frequent bursts hence proposed to be replaced by 900 mm dia watermain.

Budget provision 2016-17 - ₹2 crore

 Existing 900 mm dia 1.6 km water main along L.B.S.Marg from Pipe line road upto 'L' Ward limit is in corroded condition leading to frequent bursts, hence proposed to be replaced by 900 mm dia watermain.

Budget provision 2016-17 - ₹3.50 crore

• Measures to curtail Leakages and Contamination

Rehabilitation and Replacement of about 170.62 km of distribution Water Mains including renewal of consumer connections was proposed in 2015-16 in contamination prone areas. These works along with replacement of bunch of connections is undertaken in City, Eastern Suburbs and Western Suburbs. This will help in reducing the contamination of water. The details of the works are as follows;

a) Water Mains Rehabilitation

The work of rehabilitation of 36 km long distribution water mains with internal cement mortar-lining was proposed in

2015-16. Out of which 27 km water mains are rehabilitated and balance of 9 km will be rehabilitated by March 2016.

And 13.25 km of water main is proposed to be rehabilitated by cement mortar-lining in 2016-17.

Budget provision 2016-17 -₹6.65 crore

b) Water Mains Replacement

The work of replacement of 40 km long distribution water mains in City, Eastern Suburbs and Western Suburbs was proposed in 2015-16. However, in actual 42.91 km long water mains are replaced.

The work of replacement of 62.70 km long distribution water mains are proposed in 2016-17.

Budget provision 2016-17 - ₹180.70 crore

c) Service connections Renewal in road improvement.

Along with the road improvement programme by Road Department, in 2015-16 the work of renewal of service connections completed in road length of 112 km at 32074 locations. In 2016-17, the work of renewal of service connections is proposed for road length of 318 km at 60452 locations.

Budget provision 2016-17 - ₹71.40 crore

d) Bunch of Connection Removal

In 2015-16 a total of 169 no. of works for Removal of bunch connections was proposed out of which 115 nos. of works are excepted to be completed by March, 2016 and remaining works will

be completed in 2016-17. New 218 no. of works are proposed in 2016-17

Budget provision 2016-17 - ₹18.95 crore

e) Valve Chamber Repairs

The survey of valve chambers buried during the road improvement was undertaken in 2014-15. 1305 no. of valve chambers repaired/reconstructed in 2015-16 and 1074 no. of valve chambers are proposed for repair/reconstruct in 2016-17.

Budget provision 2016-17 - ₹9.10 crore

Water Audit

• Flow Meters

There are existing 250 flow meters installed from source to distribution zone level. However, there are 20 old types of flow meters need to be replaced and gap in measurement to be filled by additional flow meters. Additional 200 flow meters are proposed to be installed on primary, secondary and tertiary network for comprehensive water audit.

Budget provision 2016-17 - ₹7.99 crore

• Consumer Connections and Increase in Service Coverage

Municipal Water is only the source for drinking water for citizens of Mumbai. MCGM has mandate for granting metered water connections, and levy water charges against consumed water quantity. The premerger structures in island city having unmetered water supply are levied water tax in the property tax bill.

In August 2014, the policy of eligibility criteria for granting water connection in slums has changed from existence cut off period for hutments prior to 1-1-1995 to 1-1-2000. In the year 2014-15 about 8519 new water connections were granted to the consumers. This translated into about 95 MLD water supply to new consumers in 2014-15. Total metered consumer connection count in March 2015 increased to 375273. In the year 2015-16, until December 2015, about 5364 new connections were granted.

As directed by the Hon.High Court, the policy for granting water connections to all slum dwellers, irrespective of tenure is being prepared. If this policy is approved, more and more illegally connected population will come under ambit of the legally covered.

To enable ease of doing business, the application form for water connection has been simplified and made available on the portal along with the list of documents required. Also the online application process for new connections has been developed and launched. The application process is user friendly with online tracking feature. It is mandatory to take decision on the application within 15 working days.

In the year 2016-17, it is proposed to increase the coverage of authorized meter water connections by granting 10,000 new / regularized water connections.

Mumbai-Water Distribution Improvement Programme (M-WDIP)

As presented during Budget 2015 -16 Pilot Project in H/west and T wards under M-WDIP are progressing and present project status is as under –

- Network Survey and preparation of GIS maps for both the wards is in progress and will be ready by March 2016.
- Visible leak detection and their repairs is completed in both wards. In H/west ward 220 and in T ward 87 visible leaks are attended.
- Similarly, with the help of Helium Gas Technique 52 invisible leaks are detected and repaired in H/West Ward. This has helped in attending leaks and contamination problems.
- Under Customer Survey, zone wise customers and water demand is estimated. During survey, 375 illegal connections are identified in H/W ward and further action is being taken.
- In H/West ward Detailed Studies, Hydraulic Modeling and Measurement of Flows is completed. With this new data, the water supply zones in H/W ward have been reduced from 10 zones to 4 zones. In addition to this it has become possible to accommodate areas of K/W & K/E near to H/W boundary in H/W zone.
- As per the recommendations received, tenders for installation of Pressure Regulating Valves and Flow Meters are being invited.

On a Pilot basis the detailed study of Gazdarbandh slum in H/W and slum areas on the west of Guru Govind Singh Marg road in T ward have been undertaken. Therefore, the works for improvement of water supply in these slums will be undertaken in the coming financial year.

On completion of all above studies in pilot project wards and implementation of recommendations in H/W and T ward, hours of water supply in different water supply zones will be improved progressively towards continuous 24X7 supply. It is proposed to achieve this target by August 2016 in these wards.

It is proposed to focus on pilot wards and on successful completion of all the MWDIP services there, MWDIP programme will be expanded in rest of the wards in Eastern & Western Suburbs.

Budget provision 2016-17 - ₹56.50 crore

Noteworthy works

Viewing Gallery

A Viewing Gallery is proposed to be constructed at Malabar Hill Control Room for promoting the tourism and to view the Queen's necklace of Mumbai. This work shall commence in the coming financial year.

Budget provision 2016-17 - ₹4 crore

Gardens

The existing gardens at Malbar Hill Reservoir, Bhandarwada Hill Reservoir are proposed to be developed and At Veravali Hill Reservoir new garden is proposed to be developed.

Budget provision 2016-17 - ₹3.05 crore

Powai Lake Beautification

The Powai Lake is naturally beautiful lake situated along Adi Shankaracharya Marg in eastern suburbs of Mumbai. Water surface area of the Powai Lake is about 223 Hectares and it enhances the natural beauty of Mumbai.

There is ingress of sewerage in Powai lake from the locality surrounding it which deteriorates the quality of water in the lake and leads to growth of Water Hyacinth. Heavy growth of water hyacinth in the lake has become a matter of concern. Therefore, a policy decision of 'Rejuvenation of Powai Lake' has been taken. As an immediate action the water hyacinth and other floating vegetation in Powai lake is being removed by using floating Harvesting Machines.

The work of stopping of the ingress of incoming sewage is in progress by designing and constructing a new sewer line network for the locality surrounding Powai lake where sewer lines are not existing and also diverting the ingress to nearest sewer mains as far as possible.

It is proposed to appoint a renowned consultant to prepare a project report for tackling the sewage problems and also suggest measures for developing the lake as a tourist destination. We feel that the lake has enormous potential that deserved to be tapped.

Budget provision 2016-17 - ₹5.92 crore

Other Notified Works

• Solar Power Generation at Bhandup Complex

The tender for work of pilot project of 2.5 MWp. Solar power generation plant is invited. After successful completion of pilot project remaining 11.5 MWp. Solar power generation plant will be taken up. The power generated will be used for meeting the requirement of power supply of Bhandup Complex, thereby saving on the cost of purchase of power supply.

Budget provision 2016-17 - ₹8 crore

• Hydro Electric Project at Middle Vaitarna Dam

The Middle Vaitarna Dam project is completed and Mumbai city gets 455 MLD of additional water from this dam. The water released from dam has a capacity of generation of 25MW power and generation of annual 65 Million Units of electricity. MCGM has submitted a proposal for issue of Letter of Permission (LoP) to Water Resources Department (WRD) of GoM and is in continuous follow up with the State Government.

Budget provision 2016-17 - ₹0.02 crore

Valves with New Technology for Surcharged Water Mains

The repairing work or attending leakages on functioning water mains is time consuming if done by conventional methods. Dewatering of water mains needs to be carried out leading to wastage of precious drinking water. Also this work has to be completed in prescribed time without disturbing the water supply distribution system. However with the use of Valves with new technology, it will be possible to achieve the water supply to maximum locality without disruption of water supply. Considering all this, it is proposed to procure such Valves with new Technology in the year 2016-17 on pilot basis.

Budget provision 2016-17 - ₹1.20 crore

• Bottom Sludge Scraper System

During the year 2015-16, bottom sludge scraper system comprising of 02 separate units at setting tank No.6B for stage –III, Panjrapur was installed successfully on a pilot basis.

After replacement of the old scrapper system, there is considerable reduction in maintenance problems and turbidity. The new scrapper system consists of S.S.304 L metal and hence is corrosion resistant. This system is proven and tested at various settling Tanks with around 3000 installations worldwide.

Considering various benefits it is proposed to replace the old scrapper system at Settling Tank No.5A, 5B & 6A by installing the said new system.

Budget provision 2016-17 - ₹5.48 crore

• Structural Audit and Repairing works

Most of the work of structural audit of HE's properties (Service Quarters, Office Building, Control Rooms) have been completed. Based on recommendations construction of 4 New Transit Camps, repairing works to 13 Buildings was taken in 2015-16 and will be completed by March 2016. Moreover, construction of 3 New Transit Camp and repairing works to 37 Bldgs are proposed in 2016-17.

Budget provision 2016-17 - ₹25.49 crore

Awareness on Economic Use of Water

We have been undertaking various measures to increase public awareness on sustainable use of water and its impact on the environment. In 2015-16, several advertisements has been published in various publications, BEST buses, etc. Students in municipal schools were sensitised using Virtual Classrooms of the Corporation. In the current year, we intend to extend our reach through various innovative media including social networking, electronic media, in additional though the traditional modes.

Budget provision 2016-17 - ₹0.30 crore

SEWERAGE

(₹ in crore)

Ward	Revenue	Capital	Total
	Exp.	Exp.	
Mumbai Sewage Disposal Project	11.29	648.39	649.68
Sewerage Operation	770.59	189.87	960.46
Sewerage Project	26.92	198.43	225.35

Sewage Treatment Plants Upgradation

The sewage collected in Greater Mumbai limits is disposed off in the sea through marine outfalls at Colaba, Worli and Bandra and in the Creek after treatment through the Lagoons at Versova, Bhandup and Ghatkopar. The sewage collected at Malad is disposed off in the Creek after preliminary treatment.

The projects of up-gradation of the seven major Sewage Treatment Plants of MCGM have been pending for several years. We have taken certain decisions to solve long pending problems and expedite the work. The most notable amongst these is to move from a specific selected technology to open technology. We have decided to focus on the deliverables, and have made the CPCB / MPCB norms as our deliverables. We have also decided that instead of discharging the secondary treated waste water into the sea through marine outfalls, lagoons; we shall undertake tertiary treatment and use the same for non

potable purposes. Over 2000 ML of tertiary treated water per day shall be available once these projects are commissioned.

The brief status of WwTFs is explained hereafter.

 The tenders have been invited for construction of 37 MLD capacity WwTF at Colaba and it is expected to start the work soon.

Budget Provision 2016-17 - ₹80 crore

• The tenders for construction of 215 MLD capacity WwTF at Bhandup is planned to be invited soon.

Budget Provision 2016-17 - ₹50 crore

• The tenders for construction of 337 MLD capacity WwTF at Ghatkopar is also planned to be invited soon.

Budget Provision 2016-17 - ₹70 crore

There is a paucity of land for proposed Worli and Bandra WwTF locations. Worli WwTF required 12 Ha land and only 7 Ha land is in possession of MCGM. It is therefore proposed to explore providing multi-stack WwTF of 493 MLD capacity at Lovegrove Worli within the available land.

Budget Provision 2016-17 - ₹15 crore

• The land required for Bandra WwTF is about 36 Ha. However, sufficient land to that extent is not available with MCGM. Out of the land given to MSRDC, 3.2 Ha land is received back by MCGM. It is therefore proposed to explore the multi-stack technology for Bandra Zone, for providing 826 MLD capacity

WwTF at Bandra Reclamation and Dharavi within the available land.

Budget Provision 2016-17 - ₹24.50 crore

• The existing Versova WwTF is planned to be upgraded in 2 phases. In the first phase, capacity of existing lagoons will be augmented by upgradation of the present screening and aeration facilities. In the second phase new IPS and additional stream of WwTF will be Planned at Versova.

Budget Provision 2016-17 - ₹2 crore

• The consultants are being appointed to carry out feasibility study for providing decentralized WwTFs which will facilitate treatment of part of the existing sewage flow in Malad Zone.

Budget Provision 2016-17 - ₹15 crore

 Besides above major works in 7 sewerage zones in Mumbai, it is also planned that work of Vallabh Nagar Sewage pumping station and Chinchpokli pumping station will be started in the financial year 2016-17.

Budget Provision 2016-17

Vallabh Nagar Pumping Station - ₹30 crore

Chinchpokli Pumping Station - ₹10 crore

• The work of proposed S.V. Road sewer tunnel is also planned to be started in the year 2016-17.

Budget Provision 2016-17 - ₹30 crore

Appointment of Consultants

It is proposed to appoint the project management consultant for the above works. World renowned consultants have been appointed for works of treatment plant at Colaba, Bhandup, Ghatkopar, Worli and Bandra.

Budget Provision 2016-17 - ₹19.16 crore

Objectives of Mumbai Sewerage Disposal Project

It is planned to complete works of sewage treatment facilities in one phase so as to achieve the objective of full-fledged sewage treatment facilities without any delay. The proposed sewage treatment facilities will be consisting of treatment of sewage as per International Standards so as to make the treated sewage water suitable for non potable and industrial purposes. This can make available additional water for Mumbai City in the ensuing years. Therefore, it is proposed to carry out the feasibility study through the consultants for proper utilization of such treated sewage water. These steps are taken to expeditiously start the above proposed works under MSDP projects which will help in improving environment of Mumbai and reducing the pollution in the Arabian Sea on the coastal area of Mumbai.

Condition Assessment of existing Sewer Lines

It is proposed to carry out the condition assessment of existing sewer lines as these are in continuous use. Under this work sewer lines are thoroughly cleaned which enhance the performance of sewer lines. Also the condition of these sewer lines is assessed and the defects developed in the lines are found, thereby initiating repairs before collapse.

Condition Assessment of 27 km Man Entry sewer lines in Western Suburbs and 1128 kms of Non Man Entry sewer lines of City and Suburbs is completed. In the next 3 years the remaining lengths of 50 km of condition assessment and Local Repairs of Man entry lines will be taken up in phases. The work will start from Oct.2016.

Budget provision 2016-17 - ₹1.75 crore

Rehabilitation of Sewer Lines

To improve the performance of the sewer lines over an extended life span, Rehabilitation work is undertaken. Rehabilitation of 5.7 km Non-Man Entry sewer lines is completed in City area. Rehabilitation of 9.9 km sewer lines will be completed by March 2016.

Rehabilitation of 30 km Non-Man Entry sewer line and 20 km Man Entry sewer line is proposed to be carried out in phased manner in next 3 years.

Budget provision 2016-17 - ₹14 crore

Mechanization of Sewer Lines Cleaning System

There are 42 various mechanized sewer cleaning equipments owned by MCGM and 6 on hire basis in use at present, to minimize human intervention in cleaning of sewer lines. With an object to enhance the efficiency by mechanization in maintenance of sewers, it is proposed to procure modern sewer cleaning machines and increase preventive maintenance of sewer lines with use of CCTV equipments,

suction & jetting machines, SONAR unit, Robotic cutter, etc. Some of the activities are proposed to be outsourced on hire basis. This will result in reduction of surcharge of sewage. It will also helps in eliminating human interface with sewage and save water.

Budget provision 2016-17 - ₹55.71 crore

Recycling of Waste Water

A STP of 1 MLD capacity at IPS Bandra on Mahim Causeway is commissioned in June 2015. The treated sewage will be used for gardens in its vicinity.

Work order for installation of STP of 0.3 MLD capacity at Dadar Pumping Station is issued. The treated waste water by this STP shall be used for the gardens in the vicinity. This work shall be completed by June 2016.

Charkop Sewage Treatment Plant, constructed by MHADA as a part of MHADA Layout, has been handed over to MCGM in 2010. The existing plant is totally worn out and hence is proposed to be replaced with a new STP. The recycled waste water shall be used for the gardens in the vicinity. Tender for this work is invited and the work is expected to commence in 2016-17.

Budget provision 2016-17 - ₹5.40 crore

It is proposed to provide small sewage treatment plants at various locations like Municipal Gardens, Municipal properties, Municipal Markets, Municipal Dispensary. The STP shall reduce the requirement

of potable water by recycling of sewage and using them for irrigation, flushing and cleaning etc.

The ingress of sewage in the rivers will be arrested and treated before disposing it into river by providing STP's at different ingress points.

Budget provision 2016-17 - ₹1 crore

Development of GIS Centre

MCGM's GIS Development Facility Centre at Dadar pumping station has been setup. It is planned to have the data of all utilities of various departments of MCGM there.

The work of incorporation of data of sewer lines and manholes on GIS based map is in progress. Data of 1860 km (90%) length sewer lines along with appurtenances has been plotted on the GIS base map. This will help in effective monitoring of sewer lines, assessing the future projects and better Grievance Redresal System. In the current year this updation will be taken to a level of 98%.

Budget provision 2016-17 - ₹0.04 crore

SCADA System

Tenders for SCADA system for pumping stations has been invited and the tenders are under scrutiny. The system is expected to be commissioned by March 2017.

Budget provision 2016-17 - ₹7.5 crore

Survey of Street Connections

The work for survey of identifying street connections, sewer traps and grease traps is in progress. It is expected to complete the work upto Dec.2016.

Budget provision 2016-17 - ₹15 crore

Sewage Collection - Present Status

Presently, Mumbai's Sewerage System covers 91.50% of developed area. It is proposed to cover 100% of developed area by 2020, by providing sewer network on existing DP Roads and other Municipal roads.

To achieve the said target, it is necessary to lay 93.68 km of long Sewer Line. Under this project sewer line of about 31.33 km length needs to be upsize as the present sewer lines are inadequate to cater the present need. Further, new sewer line of about 62.35 km length needs to be laid. The plans, estimate and tender procedure for the same will be completed in the year 2016-17 and the entire work is planned to be completed in the coming 3 years.

Total length of non developed DP roads is about 143 km. The sewer line on these part of road will be laid in Second Phase as and when the DP roads are developed.

Sewer Lines by Open Cut-Method

• The programme to lay Sewer line about 55.64 km length by Open Cut Method has been undertaken. Out of that 41.28 km length is completed. 3.07 km sewer lines shall be completed during the year 2016-17 and the remaining work of 11.29 km will be completed in 2017-18.

 In addition to the above works, new sewer lines for 6.98 km length will be completed in 2016-17. Due to which additional 6.27 lakh Citizen of Mumbai will be covered under sewer facility

Budget provision 2016-17 - ₹65.94 crore

Sewer Line by Trenchless Method

• The programme to lay Sewer line about 43.22 km length was planned by utilizing Trenchless Technology. Out of that 28.83 km work is completed. 7.46 km length of sewer lines shall be completed during the year 2016-17 and it is planned to complete the balance work of 6.93 km length by 2017-18.

Similarly, it is proposed to take the new works for laying of sewer lines about 6.60 km in 2016-17. Out of that sewer line of 1.05 km length shall be completed by March 2017 and the balance of 5.55 km sewer line will be completed by 2020.

- The gravity sewer line work of 1.45 km length from Powai Pumping
 Station to Gandhi Nagar is in progress. 0.30 km length shall be
 completed by March 2016 and remaining 1.15 km length will be
 completed by March 2018. On completion of this work, Pumping
 Station will be eliminated and its recurring O & M cost will be
 saved.
- The tender for construction of Screen chamber at old Ghatkopar Pumping Station is invited in January 2016 and will be commenced in April 2016 and shall be completed by April 2019.

Budget provision 2016-17 - ₹119.51 crore

Sewer connectivity to Public Toilet

• To connect the unconnected public toilet units to the sewer network, a Pilot Project has been planned. On Technical scrutiny to connect 10 toilet blocks in 'M/West' and 4 in P/North, it is feasible to lay 1.01 km and 0.375 km sewer line respectively. Accordingly, tender invitation for this work is in progress.

Budget provision 2016-17 - ₹1 crore

 To reduce the pollution of Mithi River, the undertaken work for laying sewer line at Marva road, Kurla (West) and Bamandayapada is in progress and 0.45 km length of work shall be completed by March 2016 and the remaining work will be completed by January 2017.

Budget provision 2016-17 - ₹8.67 crore

Slum Sanitation Programme

Under Slum Sanitation Programme, 618 CBO toilet blocks (13673 seats) are constructed since its inception. Work of 45 CBO toilet blocks (1215 seats) is in progress. 50% seats are reserved for ladies in the toilet blocks already constructed as well as toilet blocks to be constructed under this programme. Similarly, facility of toilet seats is also made available for handicapped.

The work under Slum Sanitation Programme are transferred to Budget 'A' from 2016-17.

Revised Budget Provision 2015-16 - ₹28.52 crore

I insist that the works proposed in this budget are carried out as per the timeline framed, transparently and without any compromise with the quality. Any dereliction will be viewed very seriously.

I express my sincere gratitude to Hon'ble Mayor, Dy. Mayor, Chairman – Standing Committee, chairpersons of all other committees, Group Leaders and Corporators for their valuable suggestions. Besides, Hon'ble M.Ps., M.L.As. and M.L.Cs. have also made valuable suggestions for which I am thankful to them.

The prudent citizens of Mumbai and media have also made many good suggestions for which I am thankful to them also. These suggestions have proved very useful while preparing this Budget Estimates. All these suggestions could not be included in the Budget Estimates for which I apologize.

I now present the Budget Estimates for a surplus Revenue and Capital Budget 'A' (Fund Code - 11, 12, 60, 70), a balanced Budget 'B' (Fund Code - 21, 22, 23) and surplus Budget 'G' (Fund Code - 40) for the year 2016-17 for consideration and approval of the Standing Committee. I look forward to your wholehearted participation and co-operation

Thank you,

Mumbai

Date: 03rd February, 2016

(Ajoy Mehta) Municipal Commissioner

ANNEXURE - I Revenue Income - Budget Estimates 'A', 'B', 'E', 'G' & Tree Authority

(₹ in crore)

Sr. No.	Sources of Revenue Income	Budget Estimates 2016-17
1.	Octroi (Net)	6,895.00
2.	Property Tax	4,956.18
3.	Water & Sewerage Charges	1,244.34
4.	Receipts from Development Plan Department	6,284.71
5.	Grant-in-Aid from Government	240.96
6.	Income from investments	2,007.84
7.	Supervision Charges	978.56
8.	Solid Waste Management	115.83
9.	Receipts from Roads & Bridges	697.94
10	Receipts from License Department	168.03
11.	Receipts from Hospitals & Medical Colleges	151.24
12.	Receipts from Markets &Deonar Abattoir	51.64
13.	Other Receipts	1,850.61
	Total	25,642.88

ANNEXURE – II Revenue Expenditure – Budget Estimates 'A', 'B', 'E', 'G' & Tree Authority.

(₹in crore)

Sr. No.	Items of Revenue Expenditure	Budget Estimates 2016-17
1.	Establishment Expenses	11,744.27
2.	Administrative Expenses	1,268.62
3.	Operation and Maintenance	3,764.10
4.	Interest and Finance Charges	78.27
5.	Programme Expenses	314.98
6.	Revenue Grants, Contributions and Subsidies	6,076.22
7.	Provisions and write-off	536.39
8.	Transfer to Reserve Fund – Other	101.01
9.	Refund of taxes	288.85
	Total Revenue Expenditure	24,172.71
	Transfer to Capital Account	1,467.72
	Total	25,640.43

ANNEXURE – III Budget Estimates A, B, E, G, & Tree Authority Department-wise Summary

(₹in crore)

		Budget Estimates 2016-17		(VIII CIOIC)
Deptt.	Department	Revenue	Capital	Total
Code	-	Expenditure	Expenditure	
18	Information Technology Deptt.	178.74	144.82	323.56
21	Disaster Management Cell	22.05	12.82	34.87
24	Assessor & Collector Department	613.96	53.05	667.01
30	Education Department	1,713.89	307.18	2,021.07
31	Solid Waste Management Deptt.	2,159.77	352.45	2,512.22
32	Transport Department	493.65	61.62	555.27
33	Storm Water Drains Department	409.78	998.70	1,408.48
34	Mechanical & Electrical Deptt.	80.13	139.84	219.97
35&26	City Engineer's Deptt. & B.M.	442.39	754.97	1,197.36
37	Development Plan Department	762.23	1,015.28	1,777.51
38	Fire Brigade Department	257.77	323.82	581.59
41	Garden Department	292.85	487.10	779.95
42	Market Department	71.07	74.16	145.23
43	Deonar Abattoir Department	49.63	88.32	137.95
44	Roads & Traffic Department	690.70	3,863.77	4,554.47
45	Bridges Department	14.26	615.07	629.33
46	Printing Press Department	44.36	13.80	58.16
47	Health Department	728.32	216.36	944.68
	Major Hospitals	914.04	273.71	1,187.75
	Medical Colleges	308.00	53.12	361.12
	Specialised Hospitals	170.46	74.63	245.09
	Peripheral Hospitals	662.74	177.64	840.38
49	Water Operation Department	1,770.14	891.93	2,662.07
50	Water Supply Project Department	34.29	608.92	643.21
51	Sewerage Operation Department	770.59	189.87	960.46
52	Sewerage Project Department	26.92	198.43	225.35
53	Mumbai Sewerage Disposal	11.29	648.38	659.67
	Project			
	Other Department	10,478.69	235.02	10,713.71
	Total	24,172.71	12,874.78	37,047.49
	Contribution to Capital Account	1,467.72		
	Total	25,640.43		

ANNEXURE – IV

Capital Accounts -

Budget Estimates A, B, E, G & Tree Authority

(₹ in crore)

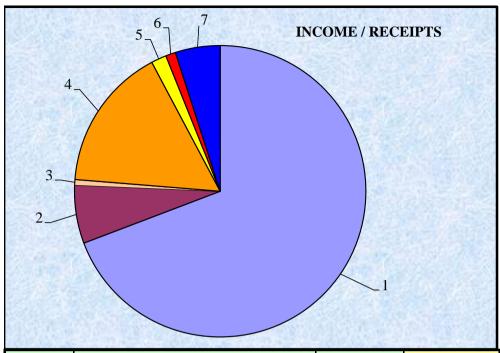
Sr. No.	Particulars	Budget Estimates 2016-17
	CAPITAL RECEIPTS	
1	Loan:	2,400.00
2.	Grants	222.35
3	Contribution from Development Fund	627.00
4	Sale proceeds/ premium of land and building	300.30
5	Accumulated Surplus	407.47
6	Withdrawal from Special Fund:	
	Assets Replacement Fund	3,561.00
	Land Acquisition and Development Fund	500.00
	Primary School Building Maintenance Fund	254.00
	Primary School Building Construction Fund	8.00
	Asset Replacement & Rehabilitation Fund	400.00
	Dedicated Urban Transport Fund	56.72
	Infrastructure Development Fund on account of fungible compensatory FSI (FCFSI)	1,130.00
	Total: 6	5,909.72
7	Other Receipts	1,542.43
	Total: 1 to 7	11,409.27
8	Contribution from Revenue Account	1,467.72
	Total -Capital Receipts	12,876.99
9	Capital Expenditure	12,874.78
	Surplus during the year	2.21

Graphical Information

OVERALL FINANCIAL POSITION BUDGET ESTIMATES A,B,E,G & TREE AUTHORITY

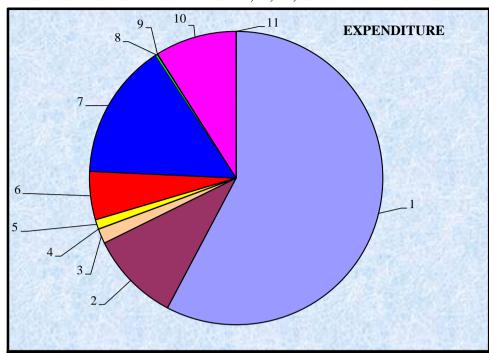
(FUND CODE-11,12,21,22,23,30,40,50,60&70)

SIZE OF BUDGET ESTIMATES 'A','B', 'E', 'G' AND TREE AUTHORITY



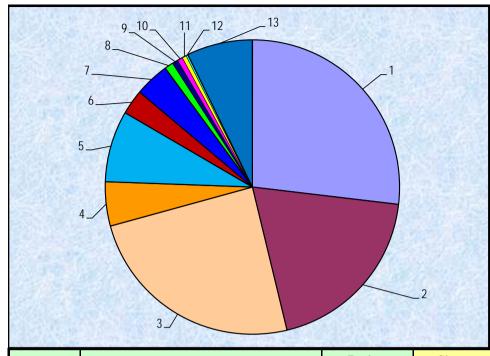
		Budget	Share
Sr. No.	Sources of Income/Receipts	Estimates	in
		2016-2017	Rupee
		(Rs.in crore)	
1	Revenue Income	25642.88	69
2	Loan	2400.00	6
3	Grants	222.35	1
4	Withdrawal from special fund	5909.72	16
5	Contribution from Development Fund	627.00	2
6	Contribution from Accumulated Surplus	407.47	1
7	Other Receipts	1842.73	5
	Total	37052.15	100

SIZE OF BUDGET ESTIMATES 'A','B', 'E', 'G' AND TREE AUTHORITY



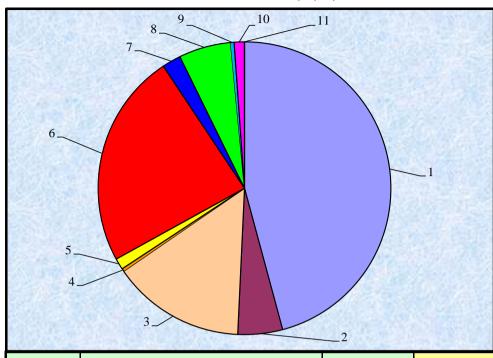
		Budget	Share
Sr.No.	Items of Expenditure	Estimates	in
		2016-2017	Rupee
		(Rs.in crore)	
1	General Budget	21396.09	58
2	Health Budget	3693.74	10
3	Improvement Schemes	603.42	2
4	Slum Clearance	6.52	
5	Slum Improvement	391.29	1
6	Education Fund	1969.12	5
7	Water Supply & Sewerage Disposal	5569.83	15
8	Tree Authority	77.74	•••
9	Provident Fund	8.24	
10	Pension Fund	3331.50	9
11	Excess of Income over expenditure	4.66	
	Total	37052.15	100

REVENUE INCOME-BUDGET ESTIMATES 'A','B', 'E','G' AND TREE AUTHORITY



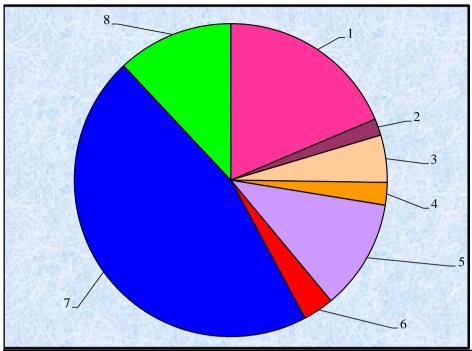
		Budget	Share
Sr.No.	Sources of Revenue Income	Estimates	in
		2016-2017	Rupee
		(Rs.in crore)	
1	Octroi (Net)	6895.00	27
2	Property Tax	4956.18	19
3	Receipts from Development Plan Department	6284.71	24
4	Water & Sewerage Charges	1244.34	5
5	Interest on Investment	2007.84	8
6	Receipts from Roads & Bridges	697.94	3
7	Supervision Charges	978.56	4
8	Grant-in-Aid from Government	240.96	1
9	Receipts from License Department	168.03	1
10	Receipts from Hospitals & Medical Colleges	151.24	1
11	Solid Waste Management	115.83	
12	Receipts from Markets & Deonar Abattoir	51.64	
13	Other Receipts	1850.61	7
	Total	25642.88	100

REVENUE EXPENDITURE -BUDGET ESTIMATES 'A','B', 'E', 'G' AND TREE AUTHORITY



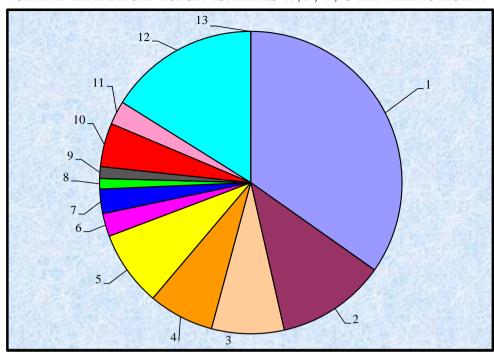
		Budget	Share
Sr. No.	Items of Revenue Expenditure	Estimates	in
		2016-2017	Rupee
		(Rs.in crore)	
1	Establishment Expenses	11744.27	46
2	Administrative Expenses	1268.62	5
3	Operation & Maintenance	3764.10	15
4	Interest and Finance Charges	78.27	
5	Programme Expenses	314.98	1
6	Revenue Grants, Contributions and Subsidies	6076.22	24
7	Provisions and Write-off	536.39	2
8	Transferred to Capital A/c	1467.72	6
9	Other Expenses	101.01	
10	Refund of Property Taxes	288.85	1
11	Excess of Income over expenditure	2.45	
	Total	25642.88	100

CAPITAL RECEIPTS -BUDGET ESTIMATES 'A','B', 'E', 'G' AND TREE AUTHORITY



		Budget	Share
Sr.No.	Sources of Capital Receipts	Estimates	in
		2016-2017	Rupee
		(Rs.in crore)	
1	Loan	2400.00	19
2	Grants	222.35	2
3	Contribution from development Fund	627.00	5
4	Receipts from Premium of land and buildings	300.30	2
5	Contribution from Revenue A/c	1467.72	11
6	Accumulated Surplus	407.47	3
7	Withdrawal from special fund	5909.72	46
8	Other receipts	1542.43	12
	Total	12876.99	100

CAPITAL EXPENDITURE -BUDGET ESTIMATES 'A','B', 'E', 'G' AND TREE AUTHORITY

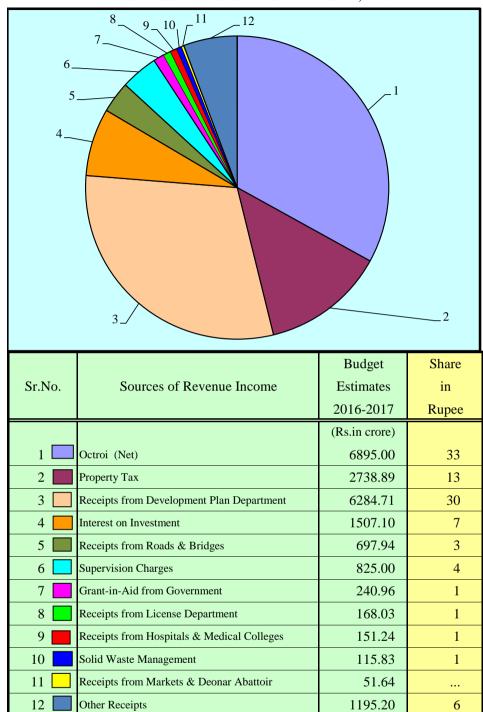


		Budget	Share
Sr. No.	Items of Capital Expenditure	Estimates	in
		2016-2017	Rupee
		(Rs.in crore)	
1	Traffic Operations, Roads & Bridges	4478.84	35
2	Water Supply	1500.85	12
3	Storm Water Drains	998.70	8
4	Health Budget	900.84	7
5	Sewage Disposal	1036.68	8
6	Solid Waste Management & Transport	316.57	2
7	Fire Brigade & Disaster Management	336.64	3
8	Information Technology	144.82	1
9	Market & Deonar Abattoir	162.48	1
10	Repairs to Mun.Properties & Slum Improvement (Budget-B)	601.18	5
11	Repairs to Primary School Buildings (Budget E)	324.57	2
12	Others	2072.61	16
13	Excess of Income over Expenditure	2.21	
	Total	12876.99	100

FINANCIAL POSITION BUDGET ESTIMATES A, B & E

(FUND CODE-11,12,21,22,23,30,60& 70)

REVENUE INCOME-BUDGET ESTIMATES 'A','B' & 'E'

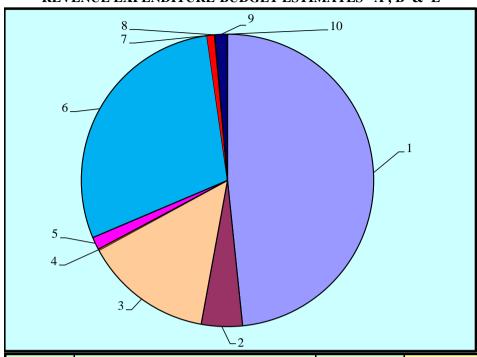


Total

20871.54

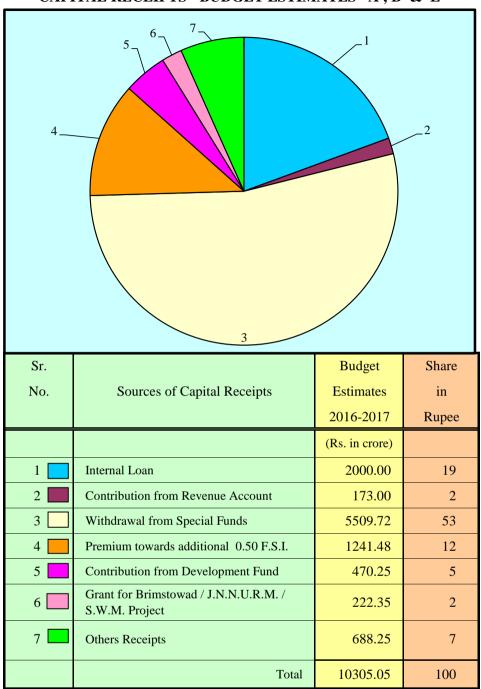
100

REVENUE EXPENDITURE-BUDGET ESTIMATES 'A','B' & 'E'

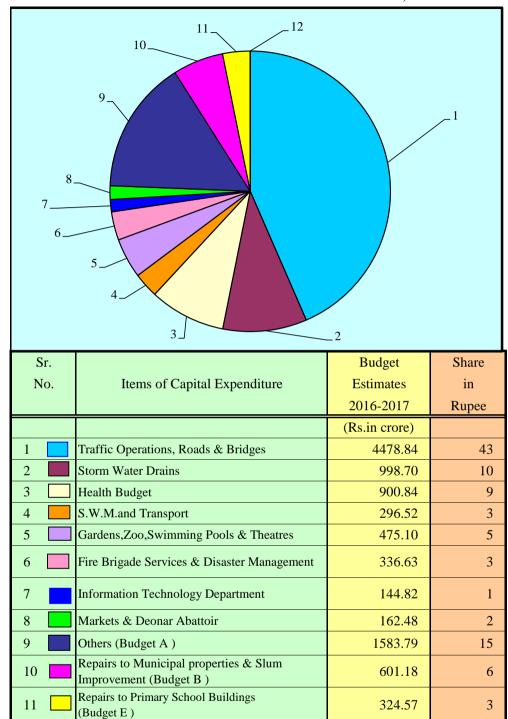


		Budget	Share
Sr. No.	Items of Revenue Expenditure	Estimates	in
		2016-2017	Rupee
		(Rs.in crore)	
1	Establishment Expenses	10091.91	48
2	Administrative Expenses	945.26	5
3	Operation & Maintenance	2961.30	14
4	Interest and Finance Charges	29.64	
5	Programme Expenses	290.32	2
6	Revenue Grants, Contributions and Subsidies	6081.34	29
7	Transfer to Capital A/c	173.00	1
8	Other Expenses	11.56	
9	Refund of Property Taxes	284.76	1
10	Excess of Income over Expenditure	2.45	
	Total	20871.54	100

CAPITAL RECEIPTS - BUDGET ESTIMATES 'A','B' & 'E'



CAPITAL EXPENDITURE - BUDGET ESTIMATES 'A', 'B' & 'E'



Total

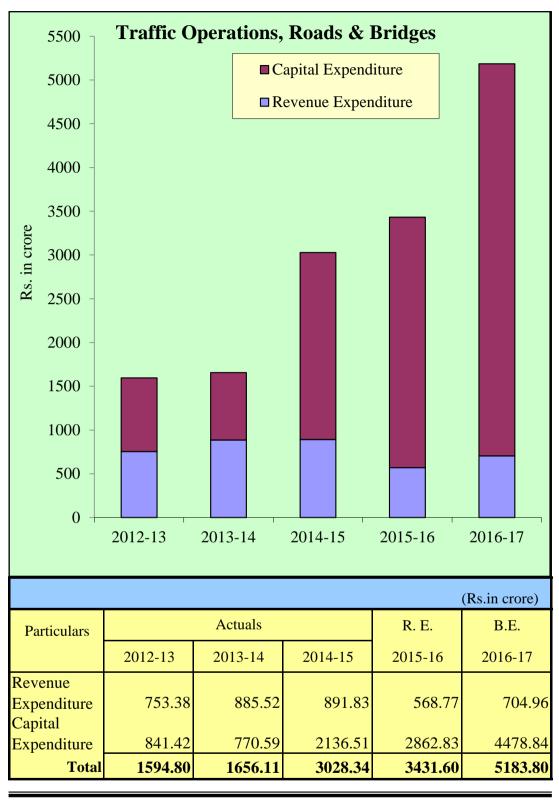
1.58

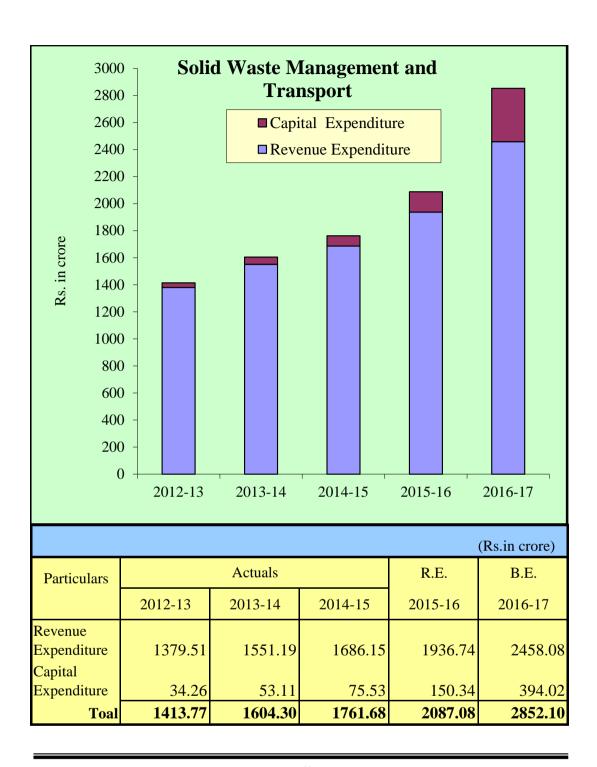
100

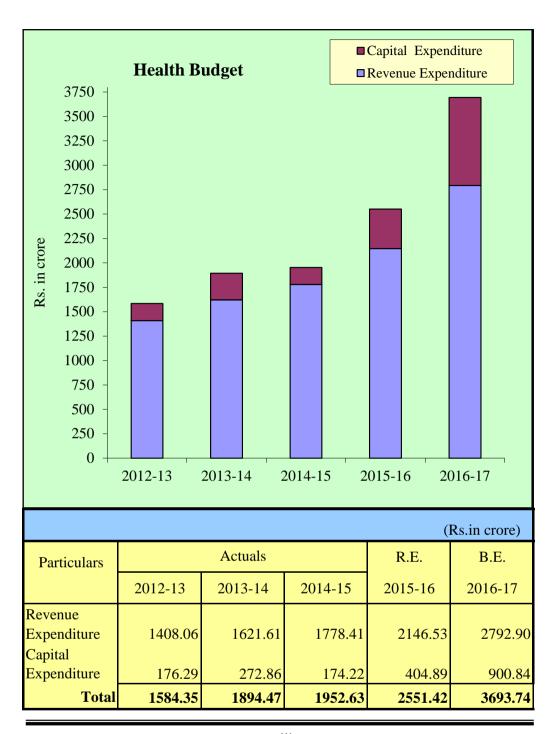
10305.05

Excess of Income over Expenditure

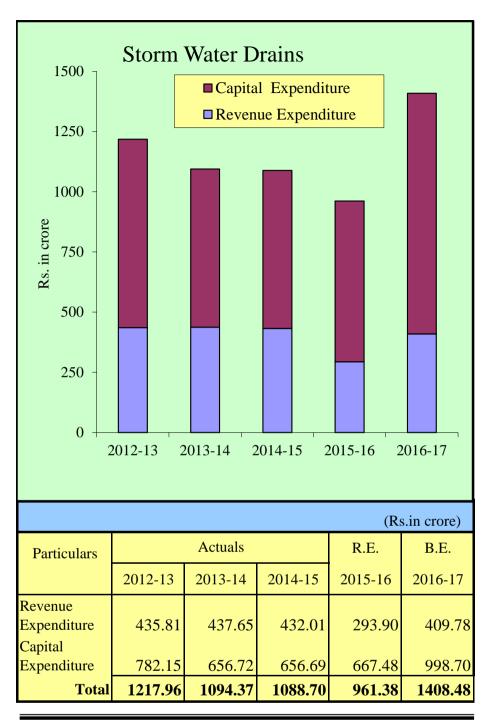
12

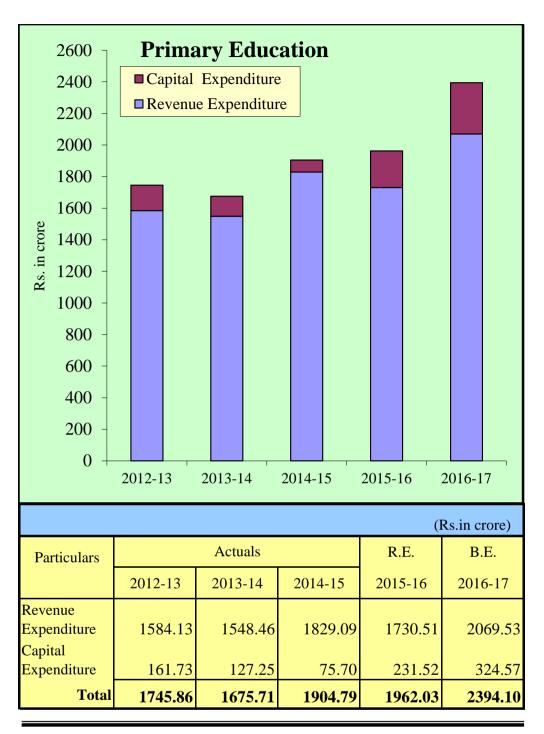


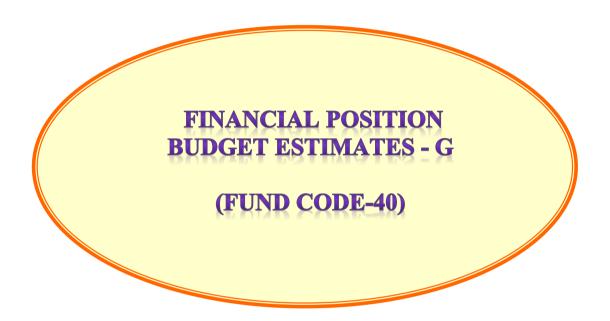




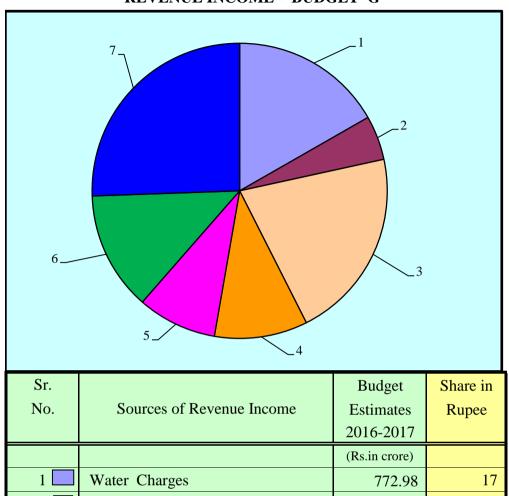
xviii





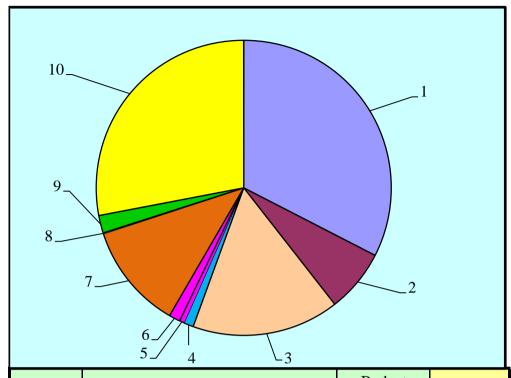


REVENUE INCOME - BUDGET 'G'



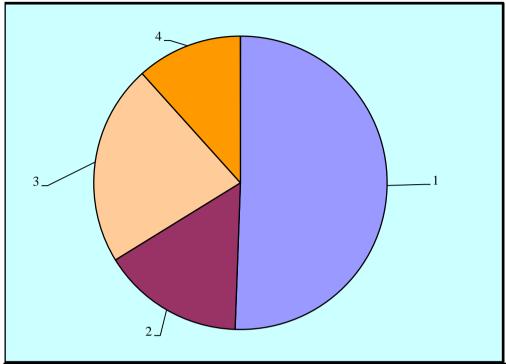
Sr.		Budget	Share in
No.	Sources of Revenue Income	Estimates	Rupee
		2016-2017	
		(Rs.in crore)	
1	Water Charges	772.98	17
2	Water Tax	224.18	5
3	Water Benefit Tax	969.79	21
4	Sewerage Charges	471.36	10
5	Sewerage Tax	402.22	9
6	Sewerage Benefit Tax	600.57	13
7	Other Receipts	1181.42	25
	Total	4622.52	100

REVENUE EXPENDITURE - BUDGET 'G'



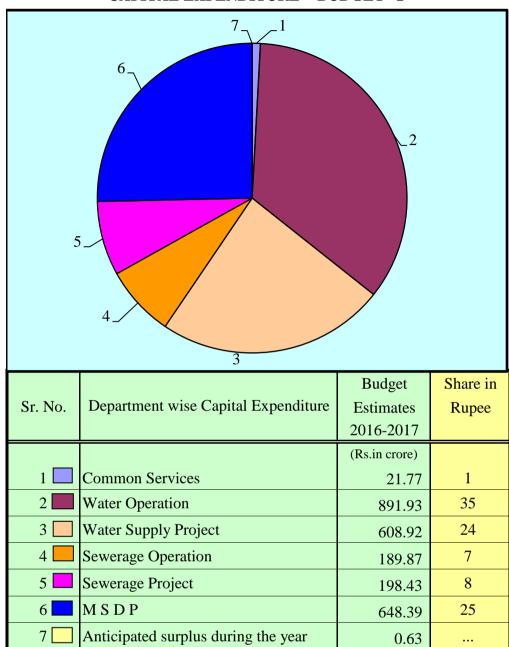
Sr. No.	Items of Revenue Expenditure	Budget Estimates 2016-2017	Share in Rupee
		(Rs.in crore)	
1	Establishment Expenses	1505.12	32
2	Administrative Expenses	318.38	7
3 🔲	Operation & Maintenance	745.21	16
4	Interest and Finance Charges	48.62	1
5 🔲	Programme Expenses	24.66	1
6	Revenue Grants, Contributions and Subsidies & Programme expenses	56.23	1
7	Provisions and Write-off	536.04	12
8	Prior period Expenses	4.09	
9	Transfer to Reserve Fund	89.45	2
10	Transfer to Capital A/c	1294.72	28
	Total	4622.52	100

CAPITAL RECEIPTS - BUDGET 'G'



Sr. No.	Sources of Capital Receipts	Budget Estimates 2016-2017	Share in Rupee
		(Rs.in crore)	
1	Internal Generation	1294.72	50
2	Loan Receipt	400.00	16
3 🔲	Contribution/Grant	566.75	22
4 🔲	Accumulated Surplus	298.47	12
	Total	2559.94	100

CAPITAL EXPENDITURE - BUDGET 'G'



Total

2559.94

100

