

Ahmedabad Water Supply

Dr. Guruprasad Mohapatra
Municipal Commissioner

**AHMEDABAD MUNICIPAL
CORPORATION**

GUJARAT



URBAN PROFILE



Municipal Corporations : 8

Municipalities :159

Constituted UDAs/ADAs : 16

Designated ADAs :113

Note:

UDA- Urban Development Authority
ADA- Area Development Authority

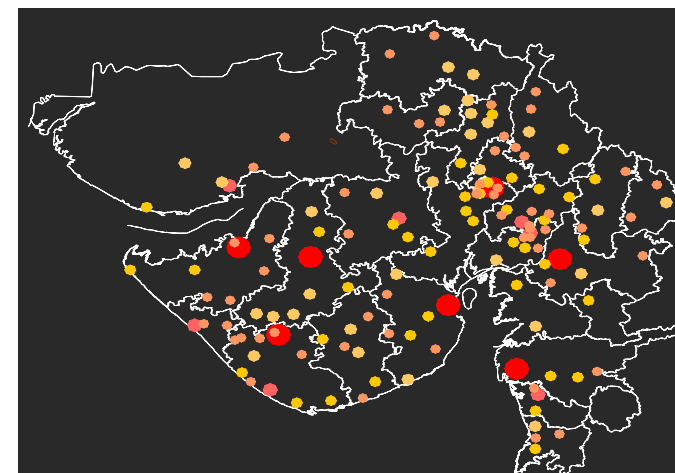
★ Municipal Corporation

Gujarat Urban Local Bodies

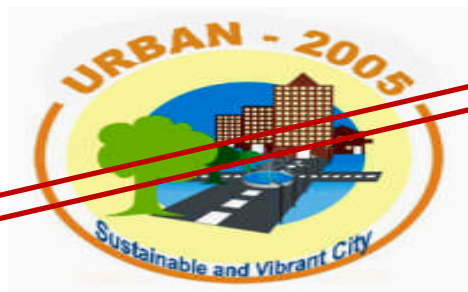
- As per Census 2011, Total Urban population of 25.7 millions

ULB category	No.	% of total Gujarat urban population
• Municipal Corporations	08	58.22
• Class-A Municipal Cities (Population above 100 thousand)	18	12.68
• Class-B Municipal Towns (Population 50 to 100 thousand)	33	11.18
• Class-C Municipal Towns (Population 25 to 50 thousand)	45	07.82
• Class-D Municipal Towns (Population 15 to 25 thousand)	63	06.28
• Other Urbanized Areas as per Census 2001	76	03.82

- Gujarat ,highly Urbanized State
- It is the third most urbanized state of India
- About 43% of its population is urban



Milestone Years



Urban year 2005

- Year of the marking in the Urban Development
- The mission visualizes Urban Gujarat as a key driver of economic development, wherein the cities are vibrant, professionally managed, more livable, efficient and productive with integrated delivery systems, guided by the principles of good governance & public accountability
- Projects/Plans worth Rs.1700 crores had been received

Jn NURM

Urban year 2007

- Jawaharlal Nehru National Urban Renewal Mission (JnNURM) seeks to provide reform-linked central assistance to select cities for infrastructure development and provision of basic services to the urban poor.
- Five cities of Gujarat are selected under JnNURM.
- Project worth more than Rs 7000 crore are executed
- Duration of the Mission is 7 years.
- Supported by Nirmal Gujarat
- Garib Samrudhi Yojana



Urban year 2010

- To upgrade Urban Infrastructure across the state
- Rs.7000 crore mega scheme by Govt of Gujarat
- Aimed at_
 - Supply of potable water in all ULBs
 - Provide underground sewerage system in all ULBs
 - Provide access to toilets in cities / ULBs.
 - 100% coverage of urban area through door to door collection system induction of sakhi mandals for operation in ULBs with scientific disposal of waste and to receive Carbon Credits
 - Construction of Suvidhayukt house for houseless families in all slums
- Duration 5 years

AHEMADABAD



Ahmedabad: City Profile

- Seventh largest city in India
- Second biggest trade center of Western India
- Commercial Capital &
Growth Engine of Gujarat State

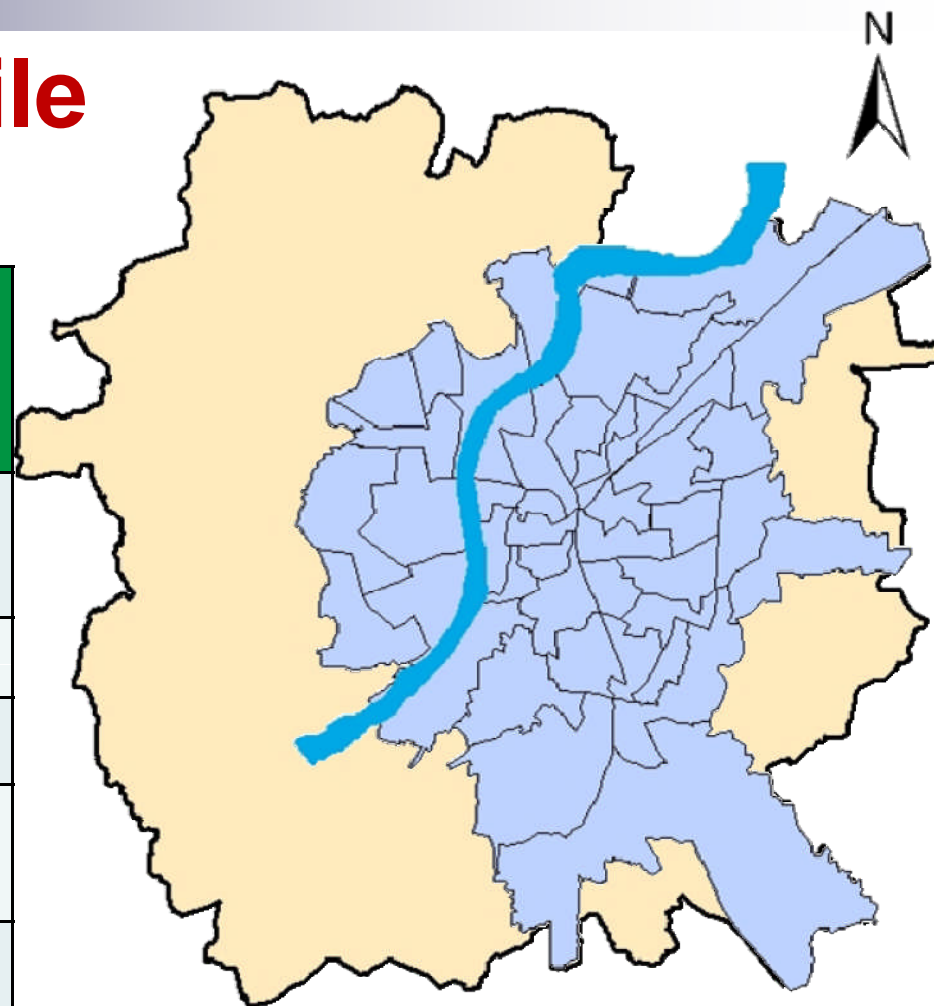
Population	5.5 million
Area	466 Sq. km





AMC City Profile

Description	Unit	Value (2001)	Value (2011)
Population	Million Nos.	3.5	5.6
Households	Nos.	5,52,164	12,65,372
Area	Sq.km	190	466
Density	persons/ sq.km	18240	12031
Zones	Nos.	5	6
Wards	Nos.	44	64



AMC new limit.:

17 Nagarpalikas and 27 gram-panchayats were merged with AMC in 2006

New West Zone Created & Area increased in south, East & North Zone



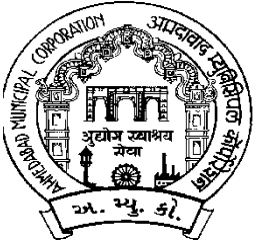
VISION

**Vibrant, Productive, Harmonious, Sustainable,
Environmental Friendly, Clean & livable city
offering its citizens a good quality of life.**



KEY SERVICES PROVIDED BY Ahmedabad Municipal Corporation (AMC)

- **Water Supply**
- **Sewerage**
- **Construction & Maintenance of Roads, Bridges, Fly-overs**
- **Solid Waste Management**
- **Fire Prevention & Ambulance Service**
- **Health and Medical Services**
- **Disaster Management**
- **Town Planning**
- **Medical Education**
- **Primary Education**
- **City Transport**
- **Parks and Gardens**
- **Zoo**
- **Swimming Pools**
- **Libraries & Gymnasium**
- **Basic Services to Urban Poor**



Ahmedabad Municipal Corporation

■ Water Supply	1030 MLD
■ Sewerage Received	700 MLD
■ Water Treatment Plants	4
■ Water Distribution Stations	141
■ Sewage Treatment Plants	9
■ Sewage Pumping Stations	44
■ Total Road Length	2363 Km.
■ Water Distribution Network	3730 Km.
■ Sewerage Network	1921 Km.
■ Daily lifting of Solid Waste	3600 MT
■ Population coverage:	
□ Water supply	90%
□ Drainage	85%

Water Supply



16/02/2008

WATER FLOW



SOURCE



TREATMENT PLANT



TRUNK MAINS



WATER DISTRIBUTION
STATIONS U/G TANKS



RESIDENCE

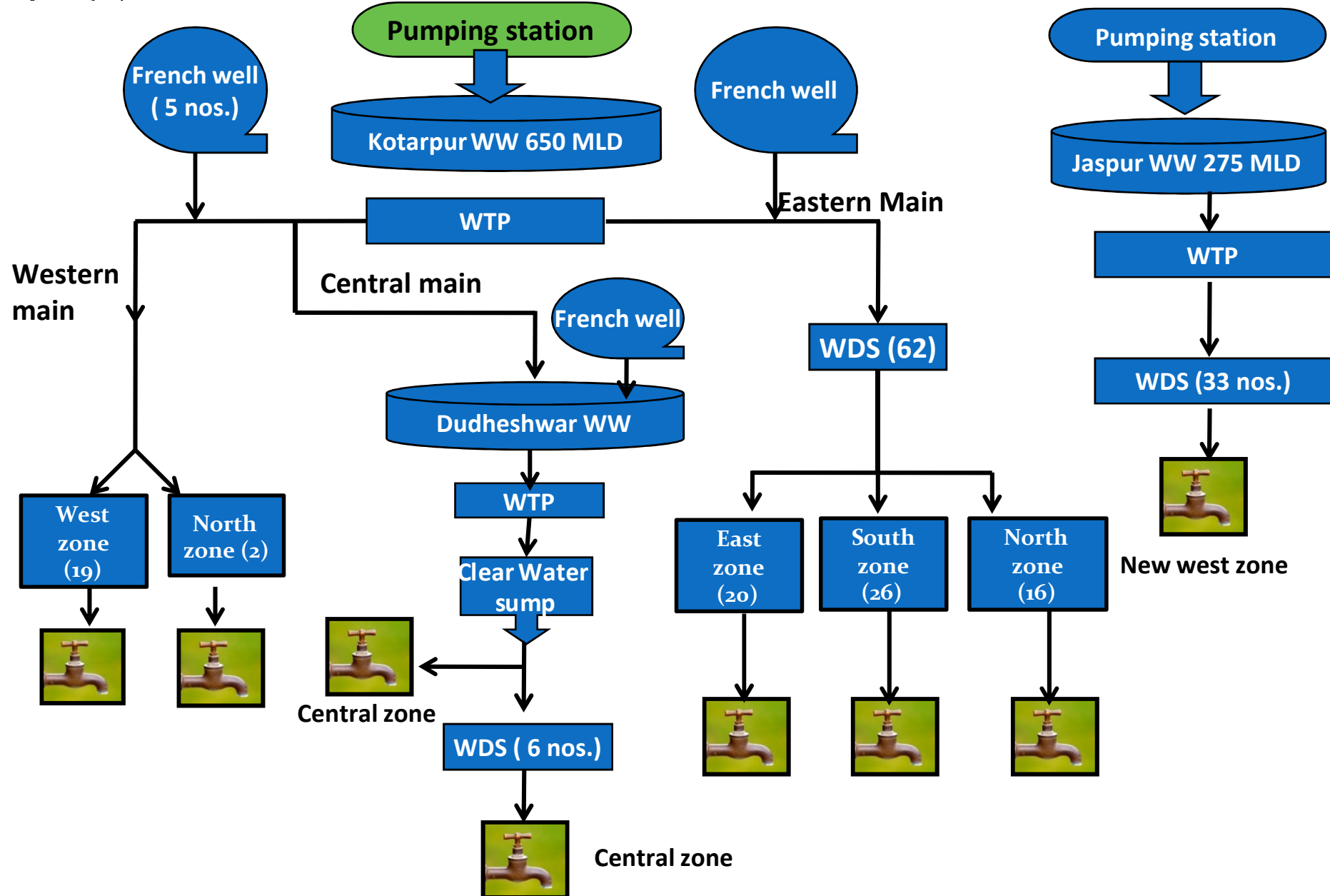
Chlorination at Treatment Plant and also at Distribution stations



Narmada Canal

Intake 1 & 2

Narmada Canal



WATER SOURCE



**TOTAL WATER SOURCE WILL
BE 1440 +480 MLD
AS AGAINST PRESENT
REQUIREMENT OF
950MLD(2.5HRS)**

Surface Water

■ RASKA	300MLD
■ INTAKE-I	165 MLD
■ DWW	70 MLD
■ French well	200 MLD
■ INTAKE-II	330 MLD
■ Pipeline from Narmada Canal	300 MLD
■ JASPUR WTP	275 MLD

Ground Water

BOREWELL	280MLD
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Water Source (Gravity Line)



Water Source (Intake & French Well)





WATER TREATMENT FACILITY - 2012

	CAPACITY	UTILIZATION
■ KOTARPUR WTP	– 715 MLD	650 MLD
■ DUDHESHWAR WTP	– 70 MLD	-
■ JASPUR WTP	– 275 MLD	220 MLD
■ RASKA WTP	– 200 MLD	120 MLD
■ TOTAL	1260 MLD	990 MLD
■ No of Water Distribution Station	141 Nos	
■ Total Capacity of WDS	920 MLD	

KOTARPUR WTP



JASPUR WTP



WATER DISTRIBUTION STATION





Infrastructure

Description	Values
No. of Water Distribution Stations	141
U/G Tanks storage capacity in ML	141 nos. (Capacity-857.40 ML)
Overhead Tanks	141 nos. (Capacity-62.69 ML)
Trunk mains & supply lines Kms	230
Distribution network Kms	3730
No. of pumping machinery	552
Per capita water supply(LPCD)	140 to 150



Water Quality

- AMC ensures quality Water Supply to Citizens.
- Disinfection Treatment through Gas Chlorination Plants (141 Nos.) at water Distribution Station and Dozers (287 Nos.) at isolated Borewells.
- Chlorine content and Quality of Water measured daily and data published in News Paper on quarterly basis and also available on website.

Parameters	Actual	As per WHO standard
• pH	7.4-7.8	6.5-8.5
• Hardness	190-280(mg/l)	300-600(mg/l)
• TDS	145-250(mg/l)	500-2000(mg/l)
• Residual Chlorine	0.2 to 0.5(mg/l)	0.2 to 0.5(mg/l)

Generating Financial Resources through User Charges (JnNURM Reforms):

AMC has charted new territory by proposing a new method of cost recovery

- Earlier the Water Tax was charged at flat fees with few slabs depending on the area of property. This method was yielding negligible income as follows:

YEAR	INCOME (Rs. crore)
2006-07	12
2007-08	15

- AMC has proposed a two new taxes in its budget for the year 2008-09 as follows:

- ☐ **Water Tax @ 30% of General Tax**
- ☐ **Sewerage and conservancy Tax @ 30% of General Tax**

Year	General (Property) Tax	Revenue from Water Tax, Conservancy & Sewerage Tax
2008-09	220	132
2009-10	300	180
2010-11	350	210



Water Connections

Type of Connection	Nos.
Residential	1111717
Commercial	33352
Public tap	2039
Total	1147107



Good Practices

- Installation of electro magnetic flow meters at 56 WDS (*out of 141 WDS*)
- Ultrasonic level transmitters at these 56 WDS (*out of 141 WDS*)
- Have a well equipped control room for display of electrical, mechanical information on water supply
- All new WDS with Automation compatible Equipments & remotely monitoring facility





Good Practices

- **Daily water sample quality checked at production, distribution & at consumer end**
- **Water quality measurement data published quarterly in news paper & fortnightly up gradation on AMC Website**
- **Result of water quality indicate the standard achieved by AMC is more than prescribed by WHO**
- **Regular training /awareness programmes for operational staff**
- **Quantum of daily water supplied data informed to Authority through SMS system on daily basis**
- **Complain redressal system through SMS initiated**





Good Practices

AHMEDABAD MUNICIPAL CORPORATION
PUBLIC NOTICE
INSPECTION OF SAMPLE OF WATER

THIS IS TO INFORM THROUGH THIS PUBLIC NOTICE THAT THE INSPECTION AND TESTING REPORT OF WATER TANK AND OTHER WATER RESOURCES ARE PREPARED BY THE AHMEDABAD MUNICIPAL CORPORATION. IT'S DETAILS ARE AS UNDER WHICH MAY KINDLY BE NOTED.

MONTH	DISTRIBUTION SYSTEM			MUNICIPAL RESOURCES		
	TOTAL SAMPLES (RES. TAPS)	PERSISTENCE OF CHLORINE BEYOND 12HRS. LEVEL	AVAILABLE RESIDUAL CHLORINE	TOTAL SAMPLES (TAPS)	PERSISTENCE OF CHLORINE IN LIMIT	AVAILABLE RESIDUAL CHLORINE
JULY-09	3977	139	3650	310	310	310
AUG-09	3083	69	2851	348	348	348
SEP-09	3357	89	3050	401	401	401

NOTE : FURTHER DETAILS REGARDING THIS REPORT IS PRESENTED ON A.M.C. WEBSITE www.egovamc.com. IT IS UPDATED EVERY FORTNIGHTLY. CLEANING OF WATER DISTRIBUTION CENTRE, WATER TANK IN ALL THE ZONES OF AHMEDABAD CITY ARE CONDUCTED REGULARLY AND IT IS TAKEN CARE THAT RESIDUAL CHLORINE LEVEL IN WATER IS MAINTAINED.

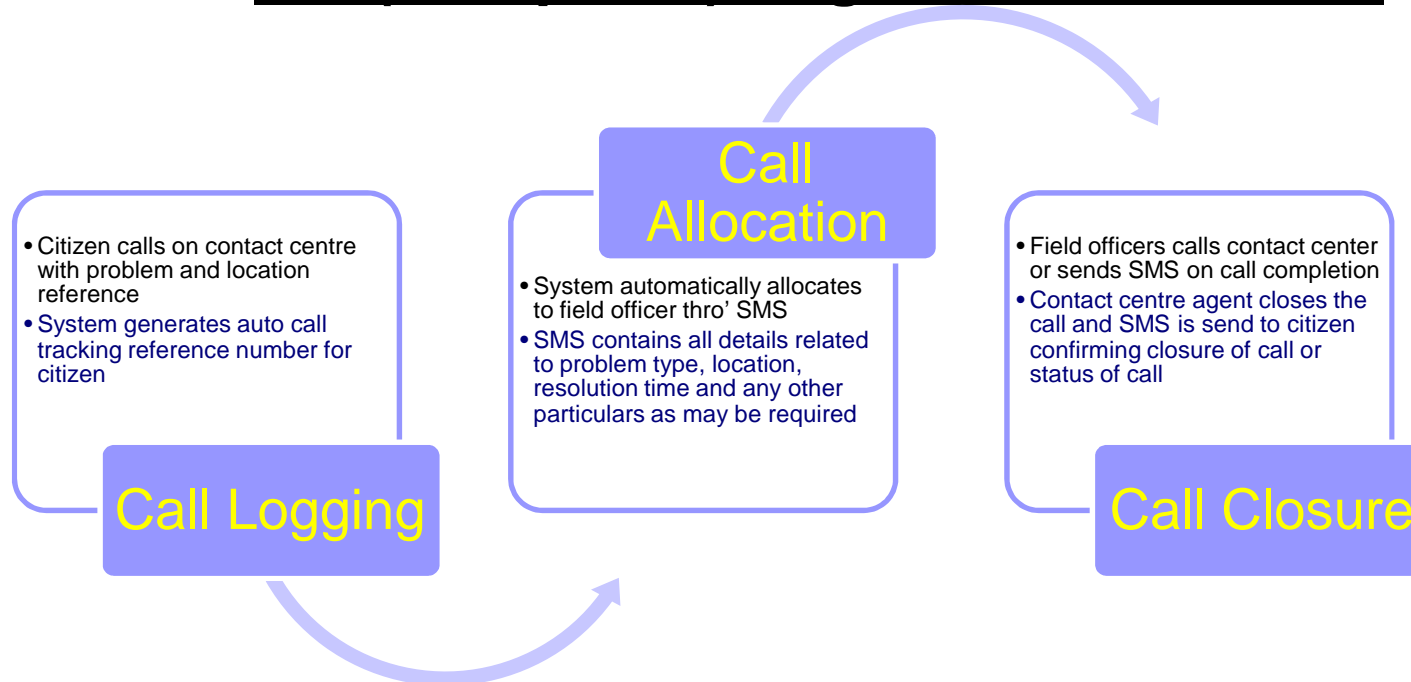
DATE : 12/11/09 MUNICIPAL COMMISSIONER
CLEAN AHMEDABAD, CLEAN GUJARAT-2009



AMC – CUSTOMER CARE CENTRE

- ❑ Started in august-2008 in the new west zone
- ❑ Aim is to improve effectiveness of municipal service delivery system.
- ❑ works online by using software called “Smart Serve”
- ❑ More than 3000 complains registered in 9 months.

Call(Complaint) Registration Process





www.egovamc.com

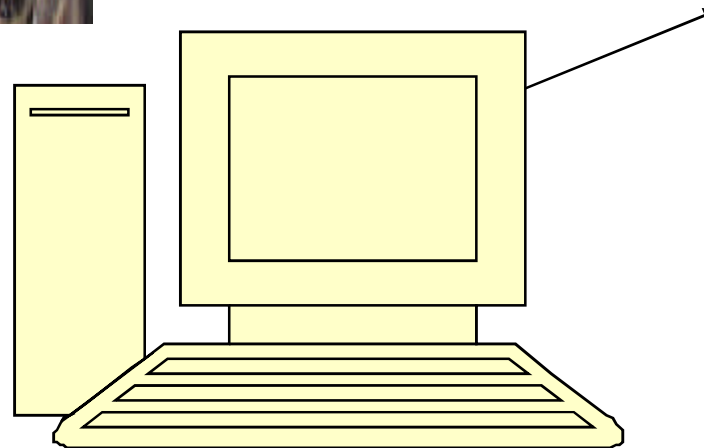


AMC Offices

**Ward
Offices(64)**



**Internet
Global Access**



Head office

**Civic Centre
+
Central Monitoring Centre
(Main Server)**

**26 City Civic
Centers to be
extended to 55
centres one in each
ward**



Banks

All offices will be connected via 2 Mbps lease line plus ISDN for back up line.

(Network of 1600 Computers on WAN)



Our Initiatives and approach

- **Maximum use of surface water (Use of Bore wells gradually reduce from 532 to 90)**
- **Target to stop all Bore wells by 2014**
- **Energy Audit and its application**
- **Leak Detection cell established for finding leakages in the network (zonal Level)**
- **System study for Clean, Adequate, Regular Daily Water Supply to All citizens.**



Achievements

- **330 MLD intake well at Kotarpur Commissioned**
- **2500 MM DIA. MS Gravity pipeline from Narmada Canal to Kotarpur Commissioned**
- **200 MLD Water Treatment Plant commissioned**
- **Saving in energy worth Rs.15 crores/year by maximum use of surface water and efficient implementation of Energy Audit survey**
- **Privatization in O&M**
- **Stop depleting Ground water level**
- **Good quantum of better quality (TDS-140 to 145) water-supply for the citizens**



Awards/Recognitions

- Prime Ministers award for excellence in " Urban Design and Concept 2003" to Sabarmati River Front Development Project
- International Best Practices 2004, City Civic Centers & E- Governance , Ahmedabad:- A Community Service Revolution, By ICMA ,International City/County Management Association Washington D.C
- CRISIL National Award for the Best Financial Management System 2004
- UNHABITAT Dubai International Award 2006 for Best Practices to improve the Urban Environment (Slum Networking Project)
- Commitment to Reforms -CRISIL Awards For Excellence in Municipal Initiatives 2007 (A Leader among Category A - Mega cities)
- Finalist for the award in World Leadership Forum London for World Leadership Awards 2007 in 3 categories – Housing, Town Planning and Urban Renewal.
- India Tech Excellence Award 2008 : Main Streaming Urban Poor Slum Networking to improve habitat of Urban Poor & providing livelihood opportunities by India Tech Foundation
- National Urban Water Award 2008- for effective Water Supply Management & successful development of market based Financing System by Ministry of Urban Development



Awards/Recognitions

- Govt. of India National Awards for e Governance 2008 Exemplary Horizontal Transfer of ICT-based Best Practice GOLD Award to " E- City ", Ahmedabad Municipal Corporation, e-Governance Department
- 'Ahmedabad Municipal Corporation' as the winner of eINDIA 2009 Awards in the category ' ICT Enabled Municipal Initiative of the Year' by Centre for Science Development and Media Studies (CSDMS) (Sep-09)
- UNEP (Urban Environmental Accord – 2009) Award for being The most Committed City in India for Urban Environmental Accord
- Govt of India National Award for The Best Mass Transit Project for the Year 2009 to Ahmedabad for “Janmarg – Ahmedabad BRTS Project”.
- International Award on Sustainable Transport Award, 2010 by TRB at Washington DC USA
- National Award for Innovations in servicing the needs of the Urban Poor 2010, to Ahmedabad Municipal Corporation by Govt. of India, India Urban Space Foundation, Swedish International Development Agency (SIDA) & the World Bank,
- International Transport Forum(ITF) and International Association for Public Transport (UITP) have conferred an International Award of Outstanding Innovation in Public Transport to Ahmedabad Janmarg Ltd. - Ahmedabad BRTS in May 2010 at Leipzig Germany during International Transport Forum 2010.

AHMEDABAD

“CITY OF QUALITY LIFE”

