

## BASIC INFORMATION ABOUT QUEZON CITY

- 📍 **Location:** in the heart of Metro Manila, the national capital region of the Philippines
- 📍 **Coordinates:** 14°38'N, 121°2'E
- 📍 **Land area:** 166 sq. km. (one of the country's biggest cities)
- 📍 **Income class:** 1st class, highly urbanized city
- 📍 **Population:** 2.4 million (the country's most populous city)
- 📍 **Population density:** 14,458 per sq. km.
- 📍 **Population growth rate** (average annual) : 1.9%
- 📍 **Population is predominantly young:** 32% are less than 14 years
- 📍 **Labor force:** 1.02 million



## BASIC INFORMATION ABOUT THE QUEZON CITY GOVERNMENT



**Mayor**  
Feliciano Belmonte, Jr.  
**Vice Mayor**  
Herbert M. Bautista

- **Congressional districts: 4;** the biggest is District 2
- **Barangays (smallest local government units): 142**
- **Annual government revenues: \$140.8 M**

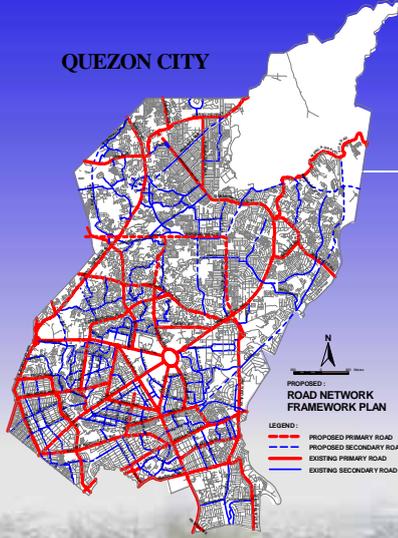


## BEST KNOWN FACTS ABOUT QUEZON CITY

- Predominantly residential community (comprising 39% of the City's land use)
- Served by the major highways and mass transit systems of Metro Manila
- Wholesale and retail trade predominates its business sector
- Has the most number of shopping malls in the country, with 17 scattered in every dense community cluster
- Reputed to be a health and wellness cluster because it has the most dense concentration of hospitals and health and fitness facilities
- Becoming known for its growing number of information technology facilities

## BASIC EST CONSIDERATIONS

QUEZON CITY



### ROAD NETWORK

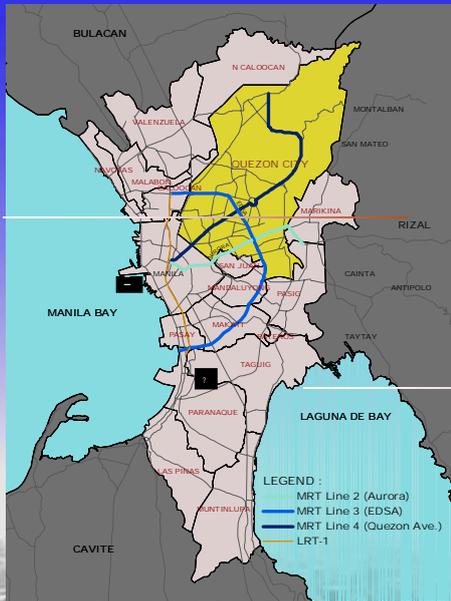
- **Total Road length: 2,077 kms.**
  - Primary Road : 154.96 Kms.
  - Secondary Road : 167.59 Kms.
  - Collector Road : 148.97 Kms.
  - Tertiary Road : 1,502.44 Kms.
  - Service Road : 103.26 Kms.
- **Road Density: 0.128 kms./has.**

## BASIC EST CONSIDERATIONS

### DISTRIBUTION OF QUEZON CITY'S ROAD NETWORK among its Congressional Districts

	CITY	DIST 1	% to City	DIST 2	% to City	DIST 3	% to City	DIST 4	% to City
Total Population (In Millions)	2.53 M	0.37	15%	1.55	60%	0.28	11%	0.33	14%
Total Land Area less Reservoir Area (In hectares)	13,538 has	1,959	14%	7,062	53%	2,175	16%	2,342	17%
Total Road Length (In kms)	2,077	315	15%	1,132	55%	300	14%	320	16%
Road Density (In kms/has.) (ideal at 0.2)		0.16		0.16		0.14		0.14	

## BASIC EST CONSIDERATIONS



## TRANSPORT SYSTEMS

- Mode of transport is purely land-based
- Average distribution by type of vehicle
  - Cars, light private vehicles: 82%
  - Jeepneys: 12%
  - Buses : 3%
  - Trucks : 2%
- Other transport modes
  - Light rail transit systems :
    - EDSA (MRT 3)
    - Aurora Blvd (LRT 2)
  - Tricycles : 20,607 units  
(confined to inner communities)

## BASIC EST CONSIDERATIONS

### 2005 METRO MANILA ANNUAL AVERAGE DAILY TRAFFIC FINDINGS



## PREVAILING TRAFFIC SITUATION

Two of the country's longest and widest highways run thru a large part of Quezon City: EDSA and Commonwealth Avenue

- EDSA is the most traveled thoroughfare with an average of 159,610 vehicles per day (vpd) volume
- Quezon Avenue is the second most used with an average vpd of 135,460
- Commonwealth Avenue is third with 117,800 average vpd (TEC, 2005)

## BASIC EST CONSIDERATIONS

### LAND USE AND PLANNING

The use of land around Quezon City is required to comply with a Comprehensive Zoning Ordinance (Ordinance No. SP 918, Series of 2000 as amended by Ordinance No. 1369, Series of 2003), which has classified portions of the City into residential, commercial/ industrial, parks and institutional areas.



## QUEZON CITY'S STRENGTHS & POTENTIALS

- **INSTITUTIONALIZATION OF THE RESPONSIBILITY FOR ENVIRONMENTAL MANAGEMENT IN THE CITY**
  - The City government created the Environmental Protection and Waste Management Department, as the City's first permanent department dedicated to keeping the environment clean and healthy
- **STRONG ENFORCEMENT OF ANTI-POLLUTION LAWS**
  - Thru effective cooperation between national and local agencies



## QUEZON CITY'S STRENGTHS & POTENTIALS

- CITY HAS THE LARGEST NETWORK OF INTERCONNECTING ROADS IN THE METROPOLIS
  - Accessibility is generally good in the southern districts, while the northern district is served by two major highways, Commonwealth Avenue and Quirino Highway
- CONTINUOUS MASSIVE CITY INVESTMENTS IN ROAD INFRASTRUCTURE IMPROVEMENT
  - City government's investment, 2001- 2006:  
\$ 76.4 million to create new access routes, and expand, widen and make concrete existing roads



## QUEZON CITY'S STRENGTHS & POTENTIALS

- PLANNED MAJOR ROAD AND TRANSPORT INFRASTRUCTURE PROJECTS WILL DECONGEST TRAFFIC IN CITY STREETS
  - MRT Line 4 (along Commonwealth Ave)
  - EDSA North Rail Project
  - Roosevelt Ave / EDSA Interchange
  - North Ave / EDSA Interchange
  - La Mesa Tollway Project
  - Republic Ave
  - Congressional Avenue
- STRONG PARTNERSHIP BETWEEN THE CITY AND TRANSPORT RELATED AGENCIES (DPWH, DOTC, MMDA)
  - Quezon City government has taken the initiative of removing obstructions, widening and improving even the national roads, which should be funded by the National Government
  - In some instances, the city has also advanced right of way acquisition costs for the National Government



## STRENGTHS & POTENTIALS

- QUEZON CITY HAS LARGE PARKS, INCLUDING ONE OF THE BIGGEST ECO-TOURISM PARKS IN THE COUNTRY

The City is host to the 2,700 hectare La Mesa Eco-Park, a health and wellness focused eco-tourism area where vehicle access is limited at the entrance and walking is highly encouraged



## STRENGTHS & POTENTIALS

- THE CITY'S GROWING NUMBER OF METRO CENTERS FEATURE WIDE SIDEWALKS AND WALKWAYS CONNECTING PRACTICALLY ALL ESTABLISHMENTS WITHIN EASY STROLLING DISTANCE FROM EACH OTHER



## CHALLENGES & CONCERNS

- **ROAD NETWORK DEFICIENCIES**
  - Lack of primary roads in the northern portion of the city to serve as anchors for ensuing development of secondary and subdivision roads
- **UNCOORDINATED ROAD LAYOUT IN SOME AREAS**
  - Presence of cul-de-sac and dead ends in some subdivisions
- **NARROW INTER-NEIGHBORHOOD COLLECTOR ROADS**
  - Some inter-neighborhood roads are insufficient in width, limiting public transport to tricycles and pedicabs which are extremely limited in capacity



## CHALLENGES & CONCERNS

- **MISSING / "UNWALKABLE" SIDEWALKS IN SOME AREAS**
  - Adds to roadside friction as pedestrians are forced to use the roadway
- **DILAPIDATED TRAFFIC SIGNS & STREET SIGNS**
  - Pedestrians, commuters and drivers are lost in direction as directional traffic and street signs are not easily readable / recognizable being not standardized in design and decrepit.
- **ABSENCE OF A MASS TRANSPORT SYSTEM TO SERVICE THE NORTHERN PORTION OF THE CITY**
  - This has resulted in a proliferation / prevalence of public utility jeepneys, tricycles and pedicabs in that area



## Quezon City

### ENVIRONMENTALLY SUSTAINABLE TRANSPORT (EST) policies and programs

to address challenges and concerns



## EFFORTS & STRATEGIES TO ADDRESS CONCERNS

- **ROAD NETWORK DEVELOPMENT PROGRAM**
  - A capital investment program for the development of primary, secondary and inter-neighborhood roads
- **TRANSPORT INFRASTRUCTURE MAINTENANCE PROGRAM**
  - An operating program for the upkeep of vehicular traffic facilities to ensure safe and smooth movement
- **PEDESTRIAN - COMMUTER FACILITIES IMPROVEMENT PROGRAM**
  - Redevelopment and improvement of pedestrian - commuter facilities (i.e., pedestrian lanes, sidewalks, loading bays, pedestrian overpasses, waiting sheds) to smoothen the flow of pedestrian and vehicle traffic
- **PUBLIC UTILITY VEHICLES REROUTING PROJECT**
  - Will integrate the different transport modes by rationalizing the routes of PUVs, reducing frequency of ride transfers and shortening distances between transfers. This is part of the strategy to encourage use of public transit modes and lessen car volume on the road

## CURRENT EFFORTS & STRATEGIES

### • TRAFFIC MANAGEMENT PROGRAM

#### Full implementation of SP 1444.S-04 (New Traffic Management Code of QC)

- Daily deployment of traffic enforcers at critical locations in the city
- During emergencies and special occasions when traffic volumes peak



- Conduct of trainings/seminars for traffic enforcers
- Acquisition of equipment (i.e., thermo plastic equipment for pavement markings and tow trucks for towing operations)
- Establishment of Vehicle Impounding Area

## CURRENT EFFORTS & STRATEGIES

### • PUBLIC TRANSPORT MANAGEMENT Road Safety and Maintenance

- The Quezon City Government together with the National Government promotes road safety within the City through ways such as establishment of pedestrian lanes, sidewalks/pathways, footbridges, streetlights/streetlamps, traffic lights, lane barriers, early warning devices, road traffic and pedestrian advisories in the form of signages, and other sound means to promote such aim.
- Efforts to decrease accidents and fatalities related to road accidents are done continuously.
- Data regarding road accidents, traffic injuries and fatalities are within the data base system of the Police command of the City.
- Sufficient budget is allocated yearly for the improvement of road safety policies.

## CURRENT EFFORTS & STRATEGIES

- PUBLIC TRANSPORT MANAGEMENT  
**Road Safety and Maintenance**

- INSTALLATION OF TRAFFIC SIGNAGES
  - Restricts /regulates, guides and informs motorists and pedestrians on the proper utilization of roads / sidewalks
- INSTALLATION OF ROAD BARRIERS
  - Details traffic and encloses no drive zone areas.



## CURRENT EFFORTS & STRATEGIES

- PEOPLE-FRIENDLY INFRASTRUCTURE  
**Pedestrian Bridges and Overpasses**

*...pedestrian safety is the most important objective of QC's transport infrastructure program...*



### PEDESTRIAN OVERPASSES ALONG

- Commonwealth Ave
- Katipunan Ave (Ateneo, Miriam vicinity)
- Philcoa-Circle



## CURRENT EFFORTS & STRATEGIES



- PEOPLE-FRIENDLY INFRASTRUCTURE  
**Pedestrian Underpasses & strolling lanes**



*...comfort is as important as speed and safety; Quezon City is now working on Phase 1 of Pedestrian Underpass Facility leading to large 25-hectare park, the Quezon Memorial Circle ..*



## CURRENT EFFORTS & STRATEGIES



- PEOPLE-FRIENDLY INFRASTRUCTURE & ROAD SAFETY  
**Loading and unloading bays**

*...pedestrian safety is the most important objective of QC's transport infrastructure program...*

- Novaliches Plaza
- East Ave., Elliptical Road, Kalayaan Ave



## CURRENT EFFORTS & STRATEGIES

- PEOPLE-FRIENDLY INFRASTRUCTURE  
Wide sidewalks and promenades

*...pedestrian safety is the most important objective of QC's transport infrastructure program...*

- Tomas Morato Avenue
- Novaliches Plaza area
- Gulod, San Bartolome & Bagbag areas



## CURRENT EFFORTS & STRATEGIES

- ROAD & PEDESTRIAN SAFETY

- Citywide Streetlighting Program

- 39,300 existing streetlights
- Average Annual Consumption: P 232 Million / year
- 2006-2008 Program:
  - Repair & Maintenance
  - Installation of 12,106 new streetlights to attain 60% illumination coverage

Priority:

- Highly populated communities where illumination coverage is below 60%
- Commercial Districts
- Main Thoroughfares



## CURRENT EFFORTS & STRATEGIES

### PUBLIC HEALTH

- Banning of cigarette smoking while on board Public Utility Vehicles, in PUV terminals and public places.
- Inspections of PUV terminals for sufficiency of facilities such as public toilets and waiting lounges, which areas are not directly adjacent to the parking area of the vehicles.
- Coordination by the City Health Department with the LTFRB and LTO on health problems brought about by transportation such as pulmonary diseases and vehicular accidents.
- Medical check-up of PUV drivers for pulmonary tuberculosis brought about by being consistently and regularly exposed to vehicle emissions.

#### Impact of policy enforcement

- **The number of smoking public on board PUV's has significantly decreased, serious pulmonary ailments are being avoided, and approximately 80% of PUV terminals had complied with the policy of the City Health Department regarding the provision of facilities for the convenience and safety of passengers.**

## CURRENT EFFORTS & STRATEGIES

### • LAND USE PLANNING

#### Promotion of non-motorized transport

- Promotion of bicycle lanes inside barangays (communities)
- The city's goal is to have these lanes connected from one Barangay to another and eventually connect the inner roads of the Barangay to the major thoroughfares of the city.



An annual event called the "Tour of the Fireflies" promotes the use of NMTs, particularly bicycles, as a mode of transportation. The event is held at the City's Quezon Memorial Circle.



## CURRENT EFFORTS & STRATEGIES

- PUBLIC TRANSPORT MANAGEMENT  
**Traffic Noise Control**

- Silencers are required to be installed in the mufflers of public utility tricycles traversing within the City.

- Loud speakers and noise generating and amplifying equipments are not allowed to be installed in public utility vehicles.



## CURRENT EFFORTS & STRATEGIES

- VEHICLE-EMISSION CONTROL  
**Roadside Air Quality Monitoring & Assessment**

- The Philippine Clean Air Act of 1999 (RA 8749) provides for ambient air quality guideline values that ensure the health and well-being of the population. These guideline values were based on World Health Organization Standards.

- Beginning late 2003, capacity for monitoring air quality within the Manila air shed has been upgraded. Among the instruments:
  - manually-operated monitoring stations along roadsides to measure TSP from vehicular exhaust and other activities close to the roads
  - eight automated and one mobile station to record ambient air quality data ranging from criteria and non-criteria pollutants.

- In Quezon City, The Manual Monitoring Stations are located in Katipunan Avenue Congressional Avenue and National Printing Office-EDSA. While the Automatic Monitoring Station is located in Manila Observatory-Ateneo de Manila University.

## CURRENT EFFORTS & STRATEGIES

- VEHICLE-EMISSION CONTROL  
Promotion of the Use of Cleaner Fuel

Intensified efforts have been made to phase out leaded gasoline, introduce alternative fuels such as biodiesel, compressed natural gas (CNG), liquefied petroleum gas (LPG) and alcogas. Gasoline stations in the City are distributing unleaded gasoline. Some stations are even offering alternative fuels.



## CURRENT EFFORTS & STRATEGIES

- VEHICLE-EMISSION CONTROL, STANDARDS, AND INSPECTION AND MAINTENANCE
  - All in-use motor vehicles, and vehicles with updated/enhanced engine whose chassis are pre-registered with DOTC/LTO will only be allowed renewal of registration upon proof of compliance of the emission standard.
  - Testing is done by accredited emission testing centers and the Land Transportation Office.
  - In Quezon City, there is a proposed Ordinance for the recognition of the City's in-house testing for motorcycles prior to registration.



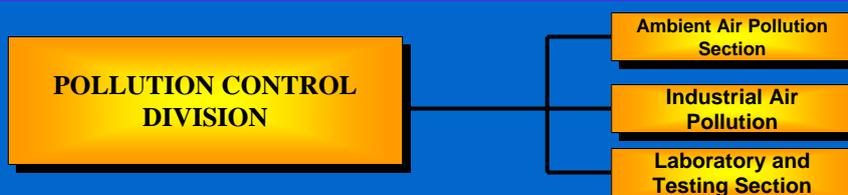
## CURRENT EFFORTS & STRATEGIES

- VEHICLE-EMISSION CONTROL

**The Quezon City  
Anti-Smoke Belching Unit  
Serbisyong Bantay Usok**



The QC-ASBU is under the direct supervision of the Pollution Control Division of the Environmental Protection and Waste Management Department (EPWMD) of Quezon City.



- Previously, the QC-ASBU conducts roadside apprehension under P.D. 1181 through the powers devolved by the Department of Environment and Natural Resources (DENR).
- Reactivated in June 2003, they are mandated to conduct roadside testing and apprehensions of motor vehicles using the certified smoke-emission testing machine along the main thoroughfares of Quezon City.
- At present, the group acts in accordance with the provisions of R.A. 8749 and other rules and regulations enforced by the Land Transportation Office (LTO) which are consistent with DENR Administrative Order No. 2000-81, series of 2000.

# QC-ASBU in action

How is it done in the field?



## QC - ASBU



## DAILY ROADSIDE APPREHENSION



## DAILY ROADSIDE APPREHENSION

- The machine operator calculates and evaluates the reading. If the vehicle fails the test, the plate remover detaches the plate and the Ticket Issuing Officer issues the Temporary Operator's Permit (TOP).
- The QCASBU is also provided with Police Assistance from the City Hall-Traffic Enforcement Group (CH-TEG) and escorts from the Department of Public Order and Safety (DPOS) of Quezon City.
- QC-ASBU operates on wide lanes to avoid traffic.
- Testing procedures are done in the shortest time possible, so as not to create inconvenience to the commuters and those vehicles with deliveries.



## IMPACT OF VEHICLE EMISSION CONTROL PROGRAMS

- An average of 5,000 vehicles are apprehended each year for violating the provisions of the Clean Air Act.

YEAR	NO. OF VEHICLES TESTED	NO. OF VEHICLES APPREHENDED
2004	6,788	5,478
2005	7,660	5,606

- To reduce the number of violators apprehended and consequently, ensure a cleaner air for the residents of Quezon City, various strategies were employed by the QC-ASBU.



## IMPACT OF VEHICLE EMISSION CONTROL PROGRAMS

### Awards and Recognition

- A year after its reactivation, the group already received a *Plaque of Appreciation* from the DENR for actively participating in and supporting the Smoke-Free EDSA Campaign of the President. Next to ABS-CBN's Bantay Kalikasan, the City recorded the highest apprehensions since 2003.
- On January 9, 2006 the Quezon City Anti-Smoke Belching Unit was awarded by the LTO as the LTO Law Enforcement Group of the year 2005 Clean Air Campaign.



**IMPACT OF VEHICLE EMISSION CONTROL PROGRAMS**  
Awards and Recognition



**IMPACT OF VEHICLE EMISSION CONTROL PROGRAMS**  
Awards and Recognition



## IMPACT OF VEHICLE EMISSION CONTROL PROGRAMS

### Awards and Recognition



## CURRENT EFFORTS & STRATEGIES

### STRENGTHENING KNOWLEDGE BASE, AWARENESS AND PUBLIC PARTICIPATION

- Information and education seminars  
Seminars and orientations on Anti-Smoke Belching are conducted regularly for public utility drivers, operators and ASBU members.



## CURRENT EFFORTS & STRATEGIES

- **STRENGTHENING KNOWLEDGE BASE, AWARENESS AND PUBLIC PARTICIPATION**
  - Information and education seminars

**IEC Materials are distributed to educate drivers/operators and the riding public on the Anti-Smoke Belching Law.**

**Regular meetings are conducted with DENR-EMB-NCR, AMMA and other LGUs for the enhancement of the ASB Campaign**



## CURRENT EFFORTS & STRATEGIES

- **STRENGTHENING KNOWLEDGE BASE, AWARENESS AND PUBLIC PARTICIPATION**
  - Information and education seminars

➤ **The local government sponsors seminars, workshops and trainings that encourage the participation of programs and initiatives for the protection of the environment and the enhancement of transportation in the City.**

➤ **Mass media is the basic form of information education campaign to raise public awareness on transport and environmental issues.**



## CURRENT EFFORTS & STRATEGIES

- **STRENGTHENING KNOWLEDGE BASE, AWARENESS AND PUBLIC PARTICIPATION**
  - Information and education seminars

Effective information and education campaigns are being done through mass media (print ads, radio and TV), seminars and workshops conducted by different Departments and Agencies, public consultations during the passing of Legislation/Ordinances related to traffic.

