

CITY INFORMATION TECHNOLOGY CENTER
HIGHLIGHTS OF ACCOMPLISHMENTS
(January to December 2016)

I. SYSTEM DEVELOPMENT MAINTENANCE GROUP

- **General Fund**

The office is mandated to adopt and apply ICT solutions as part of the strategic approach of the city government to support and further enhance the local government's thrusts and programs for public service delivery. The mandate is exemplified in the different projects undertaken relative to the development of information systems (IS) which is supported by the General Fund budget. The IS projects are categorized as new developments or enhancements scheduled for the current year and those that are continuously being maintained by the CITC.

- a. IS Development and Enhancement**

a.1 There are three ISs scheduled for development/enhancement this year which is clustered by CITC as revenue/income generating projects because one of the outputs of the IS initiates collection of fees for the city.

1) Integrated Infrastructure System (IIPS) is a computer-based IS designed to facilitate an electronic processing of permits (building & occupancy permits) issued by the Office of the Building Official (OBO) and posts the assessment to the POPS. The beneficiaries of the project are the OBO who are the system users and the transacting public who receives the output as processed by the OBO using the IS. The IIPS is targeted to be completed and installed within the year and will be fully functional. Currently, the entire IIPS project is at 75% completion. Target schedule was not met due to issues encountered in the implementation of the processing workflow. There were changes requested by the users of the system which was not within the original system design. Challenges were encountered by the users specially on the inspection side where the 72hrs requirement cannot be met at all times. This resulted in their request to re-design the processing workflow in the hope of fast tracking the processing time of occupancy permit. Although, this revision were not concretized yet pending their official request, it has been observed that one option that can be taken to fast track the inspection process is to set-up a unified inspection scheduled for the teams concerned. Additionally, tools can be used by the inspection team in the conduct of field inspections so that data can be digitally captured and forwarded as input to assessment.

2) electronic Stall Management System (eSMS) is a web-based IS project which is developed to maintain a database of market stall owners of all city government-owned public markets, monitoring of all public market stalls and generates computer-assisted assessment, which is posted to the POPS. The IS office beneficiary is the City Economic Enterprise (CEE) of the City Administrator's Office (CADO) and the public who are stall owner applicants. The IS project is targeted for completion within the year and is currently at 10% completion. No movement to the project development due to non-availability of developers who will be assigned for the project. However, a budget was allocated for the hiring of job order personnel but the allocated salary is not as competitive as the prevailing jobs on the market. Perhaps, there is a need to upgrade the compensation level of job orders or shift to other employment category, like

contract of service, so that the government can compete with other companies on the same pay bracket.

3) enhanced Occupational Permit System (OPS) is a web-based IS developed to facilitate the processing of occupational permits and mayor's clearance issued by the City Mayor's Office

(CMO) Business Permits Licensing Office (Business Bureau). The beneficiaries of this IS are the Business Bureau and the transacting public required to secure the said permits. It is 100% completed and is currently used by Business Bureau; constraints such as slow connectivity were experienced. The users also have difficulty in using the system because they are comfortable using the old system which is a desktop application. To force the end-users to utilize it, technical persons uninstalled the old system from their units thus giving them ample time to use and navigate it. The OPS is significantly used during the renewal of business permits since bulk transactions were carried out.

a.2 Other IS development/enhancement undertaken by the CITC is clustered under public governance which aims to support the internal business processes of the local government. There are three IS projects under this cluster that is utilized by the different local government departments and one IS project that is extended to the Task Force group of Davao City.

1) Document Management System (DMS) is a web-based small IS designed to store scanned images of Real Property Tax Declaration records and to provide easy access of the digital image. The IS was requested by the City Assessor's Office who is considered the beneficiary. The IS project was not part of the annual target of CITC but was still accommodated because the project can be achieved at a short time and is already 100% completed.

2) Document Processing Management System (DPMS) is a computer-based IS designed to automate the operation of tracking and monitoring the status of submitted documents in an office. This IS was requested by the Office of the City Planning Coordinator particularly the Zoning Enforcement Division who is also considered as the beneficiary. This project is not part of the annual target but has been accommodated for development and is already 100% completed and currently functional. DPMS has the capability of sending messages (SMS) to the taxpayer/client by using a third-party application (i.e. Globe, Sun portable internet stick). The users should regularly check the unit for load for networks to continually send the messages.

3) ICT Equipment Inventory System (ICT-EIS) is a web-based IS designed to keep track all inventory of computer equipment's hardware and software. The system will benefit the Computer Equipment and Maintenance Group (CEMG) of CITC and makes them the office beneficiary. The system is targeted to complete in a year and is currently 50% completed. The ICT Equipment Inventory System is 95% completed. The remaining 2nd phase of the project comprise the Reports Module. However, due to constraints like lack of manpower, user training and feedbacks from the user, the team were not able complete the system.

4) Vehicle Profiling System (VPS) is a web-based system that can also be implemented in mobile gadgets that manages all information in relation to the city's public safety. It aims to prevent, detect and respond to possible terrorist threats in the city with its beneficiary, the Task Force Davao who has the primary function to secure Davao City from possible terrorist attack. The system is targeted to be completed by the end of this year and is already 50% completed. The 2nd phase of the system which is scheduled to be developed on the second semester of the year 2016 was on-hold due to the unavailability of the client.

5) mySIS (my Supply Inventory System) is a web-based IS designed to keep track the inventory of supplies. The system aims to help the personnel in charge to determine the size and placement of the materials within the office. It is created for Office of the City Planning Coordinator. This project is not part of the annual target but has been accommodated for development and is already 100% completed and currently functional; however, it was not fully utilized by the target beneficiary.

b. IS Maintenance

b.1 IS Projects which have been developed by CITC and are already implemented and utilized by the beneficiary office are still being maintained and supported. For the current year there are (2) revenue generating IS projects maintained, (7) ISs clustered under governance are being supported and (2) IS projects clustered under social service.

1) Revenue generating projects maintained are electronic Business Tax System (eBTS) and OPS.

2) Governance cluster IS projects include Document Tracking System (DOCTRACK) is a computer-based IS which supports tracking of city government documents routed internally and externally and builds an initial database of digital images of scanned documents. City government department & offices located within the vicinity of city hall benefits from the use of the IS implemented in a networked environment while city government offices located outside the vicinity run the IS on a stand-alone mode.

3) Business Permit Queuing System (BPSQS) or the First Come First Serve System is a computer-based IS developed for the Business Bureau which automates the queuing of transactions related to business permits. This system has been able to regulate the transactions made in Business Bureau by streamlining queue to enhance queuing efficiency. It uses a touch screen monitor allowing clients to select the required type of transaction in which a ticket number will then be issued based on the selected transaction. The clients can keep track on the progress of the ticket numbers which will be shown on the Large Format Display (LFD) TV monitor alongside informative and entertaining videos while waiting for their numbers to be called. Minor errors such as client pc cannot communicate with the terminal were experienced, but CITC has been able to address that.

4) Business Permit Application Tracking System (BPATS) is a computer-based IS designed for the Office of the City Mayor's Office – Business Permits Licensing Office (Business Bureau) to track and monitor the status of the business permit applications. Similar to DPMS, BPATS also has the capability of sending messages (SMS) to the taxpayer/client. The following are the constraints faced by the users: (a) the need for the users to regularly check if the network has load; (b) stability of network's signal (i.e. Smart and Sun) in Sangguniang Panlungsod; and (c) error in encoding the contact number of the taxpayer by the receiving end.

5) Resolution & Ordinance Tracking System (ROTS) is a web-based IS designed to support the creation, storage, tracking & maintenance of passed resolutions & ordinances of the city government council. It's main beneficiary is the Administrative Division of the City Council and as well as the public who requests digital copies of approved resolutions & ordinances.

6) Davao City Animal Profile Information System (DC-APIS) is a computer based IS which creates and maintains a databank of animal registration records, within Davao City, inclusive of its basic profile. The City Veterinarian's Office is its office beneficiary and the public that they cater to.

7) Attendance Monitoring System (AMS) is a computer-based IS developed to facilitate the generation of Daily Time Records of employees. The beneficiaries of this IS are the offices of the City Government of Davao. It is a user-friendly, flexible, and full featured employee attendance management tool which allows controlling employees' attendance by automating timekeeping and attendance tracking. AMS primary output is the Daily Time Record (DTR) prescribed by the Civil Service Commission. Constraints encountered are the following: (a) in cases of procurement of new biometric system, different sensor brands use different database and management console thus there is a need to add/create new routine in the program to cater the sensors' version; and (b) since this is a stand-alone system, the end-user has the responsibility to backup their data to avoid data loss.

8) City Government Text Messaging System is a system commonly referred to as "text messaging" service for sending messages. It allows messages to be sent and received to and from mobile telephones and emails. Text messages will be sent individually or by group. The beneficiary of this system is the city government employees.

9) Under the Social Service cluster are the City Public Assistance Management System (CPAMS) is a computer-based IS developed to support the extension of government assistance to the public. The City Mayor's Office under the Lingap sa Mahirap Program is the office beneficiary of the IS together with the public who are requesting for government assistance.

10) Senior Citizen ID System (SCIDS) is a computer-based application system designed to support the ID issuance for Davao City's Senior Citizen population. The Office of the Senior

Citizen Affairs (OSCA) is the office beneficiary of the IS together with the Senior Citizen population of Davao City.

As of this report all the IS identified above are fully utilized by the corresponding office beneficiaries and has been targeted to provide 100% full support in terms of response to system maintenance and user requests.

Best practices adopted by CITC are in terms of its IS Project management and Development. IS project management adopted is team-based where IS projects are assigned by project teams. Each project team is headed by a Project Lead and supported by Analyst, Designer, Developer, Tester and Client Support staff. Projects assigned to each teams are independently managed by the Project Lead but are reporting to the CITC OIC who is considered as the over-all Project Manager of all IS projects undertaken. In terms of IS Development, each team practices the basic principles of adopting a development methodology, requirements gathering and assessment, documentation, testing and user feedback.

II. NETWORK FACILITIES AND MANAGEMENT

A.) Network Administration

- Monitored 260 days server / internet activities
- Installed / maintained 15 network operating system
- 693 Network/internet workstations configured/maintained
- Application system users access maintained, 346 transactions
- 8 Application systems/ websites installation conducted
- 184 Routers/ access points configured/installed/maintained
- 9 Internet firewall security installed / maintained
- 6 Network site transactions connectivity configured/maintained

B.) Database Management

- Backed-up / Restored 2,701 network database files
- Managed / Maintained 220 network database records
- Maintained 971 file server disk transactions
- Reviewed / served 425 user request transactions

C.) Computer Operations Support

- Installed/maintained 356 Software packages
- Backed-up 357 application system programs, DB Stru. And docs
- Reviewed/served 203 User request transactions
- Resolved/managed 25 requests for project activities/tasks
- Prepared/reviewed/finalized 199 Project status requests

III. COMPUTER EQUIPMENT MAINTENANCE & SYSTEMS ENGINEERING

A. Computer Hardware (HW), Peripherals and Software (SW) Maintenance Services

- Monitored progress of activities thru 85 Monitoring Reports on maintenance services
- Kept 493 units of equipment (Computer HW & Peripherals) in serviceable condition
- Provided 142 Standard & up-to-date Technical Specifications for ICT Equipment with estimated amount/price per item
- Installed / relocated 331 units of Computer HW & peripherals
- Preventive Maintenance of 545 units that minimized equipment breakdowns
- Installed/maintained 747 licensed SW
- Kept track of City Government's ICT Equipment: 5,644 units of HW & peripherals, and 1,355 licensed SW thru five (5) Inventory Reports of ICT Equipment/SW Licenses
- Encoded/updated 6,238 inventory data records (HW/SW)

- Received/released 744 units of Computer HW & Peripherals for Maintenance Services
- Prepared and submitted 104 Summary Report of List of Requests (Received & Released)
- Prepared 48 Canvass Reports on estimated current market value of ICT equipment

B. Cable Installation / Maintenance

- Updated cable layout design of 13 offices
- Installed/maintained 1,761 meters of cable to Offices connected to the local area network system; internet connectivity; and troubleshoot connectivity error

C. Provided Technical Evaluation / Recommendation thru 31 reports

D. Carried out research (R & D) on ICT (59 items), applied current ICT Technology and recommended the same

E. Timeline of programs /activities were presented in the three (3) Development WorkPlan submitted

F. Prepared and Submitted 103 Accomplishment Reports

G. Prepared and Submitted 14 IPCR / OPCR

H. Written 17 letters / indorsement, etc.

I. Coordinated Training Programs of the office thru 4 TPC Reports

J. Monitored performance of staff thru 25 MPORs (Monthly Performance Reports)

K. Journal (quarterly) Performance Monitoring & Coaching (PMC) thru 4 PMC Journals

L. Planned and recommended six (6) Projects to enhance ICT capability

IV. ADMINISTRATIVE SERVICES:

Plans, Organizes & Controls Administrative Activities in the Office

Records Management

Personnel Management

Property & Supply Management

Budget & Finance

Office Management & Repair

Submitted by:

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CITY INFORMATION TECHNOLOGY CENTER

Cy 2016 Annual Development Fund (ADF)

1. DAVAO CITY GOVERNMENT WIRELESS WIDE AREA NETWORK- INFRASTRUCTURE UPGRADE:

The Wireless Wide Area Network (WWAN) - Infrastructure Upgrade Project aims to address the challenges that may occur when identified application systems will be utilizing the WWAN as a communication highway for data delivery to satellite offices located at the districts and other identified collection centers.

The infrastructure upgrade aims to achieve the following undertakings:

- Upgrade of eight (8) wireless antennas and peripheral devices to improve linkage of (8) satellite offices located in Calinan District, Tugbok District, Baguio District, Talomo District, Bunawan District, Brgy. Mahayag, Buhangin District and SP Bldg. Rooftop;
- Installation of five (5) new wireless antenna to create new link sites and create connectivity reach covering 5 additional stations namely Slaughterhouse, Bankerohan City Government Bldg., DCOTT, Sta. Ana Port and CTO Lasang.
- Together with the upgrade and expansion are training on the equipment to be used in this project for both CTO and CITC technical personnel;
- Upgrades in terms of application systems and its corresponding hardware is also undertaken to improve processing power and improved connectivity of participating city government offices while utilizing the WWAN. Application systems identified are POPS, IIPS, eBTS & City Health Card Issuance. A minimum manpower complement is also included to augment development efforts for the POPS as its functionality will be extended to include the assessment of miscellaneous accounts of different City Government Offices.

CITC has also undertaken IS projects which were considered to be priority developments and is supported by the Annual Development Fund budget. For this year's ADF funded projects, CITC took on (2) development IS projects and (2) enhancement IS projects.

a. IS Development

IS Projects for development clustered under Revenue Generating are the:

1) Point of Payment System (POPS) is a unified collection system capable of capturing payment entries, either manually entered by system users or posted by other systems (e.g. IIPS, eOPS, etc.), generation of official receipts and end-of-day collection reports done at identified collection centers within the city. The office beneficiary of the POPS is the City Treasurer's Office (CTO) specifically the Cash Receipts Division (CRD) who are considered the system users. Indirect beneficiaries are other sections of CTO and other city government departments/offices that requires information pertaining to collection. The project is already 100% completed and deployed at the CTO-CRD with (6) computer units attached to the database server. The deployment is limited to the central office only pending the upgrading of the wireless wide area network managed by the CTO. The initial design as agreed with the CTO is to computerized payments using accountable forms 51 (AF51). Use of the system corrected the use of the account codes which is universally used by all offices requesting the CTO to collect their assessment. It also is a complementary system of other application systems which produces order of payments and afforded online posting of these order of payments from the originating offices.

2) electronic Order of Payment System (eOPS) is a web-based IS designed to provide support in the preparation of order of payments of different city government departments/offices for collection purposes and posts the assessments generated in the POPS. Office beneficiaries of the IS are city government departments/offices who requires payment of fees on rendered government services. The project is already 100% completed and is deployed to different offices/departments who expressed their intentions of using the system. Presently there are eight (8) offices or departments which has used this system and are already connected to the CTO. The user acceptance certificate is due to be signed by the user as soon as they are available for a meeting.

b. IS Enhancement

IS Projects for enhancement under the Revenue Generating cluster is the:

1) Business Permit & Licensing System (BPLS) which is an enhanced and improved version of the existing eBTS. This is a web-based IS developed to automate the processing of business permits. The project is 100% completed and currently functional. The BPLS is already deployed at user site and is currently being monitored for fine tuning activities. The beneficiaries of this IS are the Office of the City Mayor – Business Permits Licensing Office (Business Bureau), City Treasurer's Office – Business Tax Assessment Division and other Regulatory Offices (Office of the City Planning and Development Coordinator, Office of the City Building Official, City Environment and

Natural Resources Office, City Health Office, City Veterinarian's Office, City Tourism and Operations Office and Bureau of Fire Protection). A newly signed Joint Memorandum Circular (2016) which aims to streamline business permits and licensing system using revised standards was issued on August. Under the new joint circular, the LGUs are directed to cut the business registration process to only three (3) steps and issue business permits within two (2) days for new business registration and one (1) day for renewals. Because of this, BPLS or eBTS had undergone a series of modification; this includes the formation of the One-Stop-Shop located at the SP lobby. The following are the constraints encountered: (a) the need to station personnel at SP that has the authority to approved and disapproved business permit application; (b) the separation of POPS and BTS connection to maintain speedy connection to servers, thus, there is a need to set-up a separate LAN connection; and (c) connectivity of the Regulatory Offices.

2) The second project for enhancement is the Davao City Government Web Portal is the official website of Davao City. The site contains valuable information about Davao and is maintained to provide the public the latest and reliable information of Davao City. Beneficiary of the portal is the general public. The website is 100% completed and is due for platform update and enhancement by the second semester of 2016.

The enhancement of the website's platform from HTML codes to Wordpress is 100% completed. The web designers were able to come up with an enhanced website accessible to the public, fully functional features, responsive and compatible with almost all major browsers. The website also features the webpages of Davao City Government offices. However, some difficulties were encountered before, during and after the design and development of the website. One of these is the lack of manpower to update the website. CITC needed to hire two (2) job order personnel in order to make the project possible. Another difficulty is the in cooperation of some users who are required to complete all the information needed in their webpages but are not able to comply despite follow-up letters and calls. The team see to it that users undergo a user orientation on the enhanced website so that they will be able to efficiently update and managed their own webpages.

Best practices adopted by CITC on these projects aside from team-based project management approach and adopting IS development principles, is the adoption of an IT architecture that is geared towards an integrated Enterprise Architecture implementation. The implementation of the IS development projects will be utilizing the existing Wireless Wide Area Network (WWAN) of the city government which will be strengthened and improved to be able to allow all IS (both CITC developed & developed by other city government departments/offices) to be deployed to the different collection centers located across the city, if applicable.

2. City Government Web Site Hosting with Corporate Internet Access

Result of the public bidding for this continuing project showed that there were only two (2) Internet Service Providers (ISP) who tendered their bids, one offered a bandwidth of 10 Mbps running on copper wire while the other offered a much higher bandwidth of 30 Mbps running on fiber optic cables.

CITC recommended to take the latter even though the bid amount offered was a little bit higher as per evaluation the specifications were more advanced and adoptable to the current IT trends thus, the Bids and Awards Committee (BAC) deliberated on the matter and awarded the same to the bidder who offered the bandwidth of 30 Mbps. It is not always the lowest bidder that wins but the best offer which is advantageous to the government.

Aside from the bandwidth upgrade of 30 Mbps the subscription was bundled with SMS Text Blasting facility and Cloud Computing Platform which is currently utilized by our website (www.davaocity.gov.ph) having a storage capacity of 60 GB for Windows, 60 GB for CENTOS and 60 GB for our proposed on line payment all running on dual core processors and 4 GB of RAM.

The internet connectivity within the City Hall building was maintained by the CITC personnel as well as the updating of website of the different departments/offices within the City Government of Davao.

Since we didn't have enough or the needed infrastructure to host our email services, it was decided that it be hosted by the Department of Information and Communication Technology (DICT) at no cost while the email accounts shall be maintained and managed by CITC personnel.

3. Upgrade of City Hall Building Communication Services from PLDT Direct Lines to IP-PBX

This is an on-going project initiated by the City Administrator's Office which aims to address the cluttered or messy telecommunication line connections within the City Hall building.

During the implementation the supplier encountered delays beyond their control in the delivery of supplies and materials needed for the project thus, requested an extension of 30 calendar days which the BAC approved.

Significant accomplishment were the following:

- Installed structured cabling system traversing different offices within the City Hall Building with one (1) main distribution frame and two (2) intermediate distribution frame
- Configured the IP-PBX Primary and Secondary Servers
- Deployed 80 IP Phones to the different offices within the City Hall Building

Local calls could already be catered as the IP phones has been configured and assigned local numbers, for the incoming outside calls we are still awaiting the PLDT SIP Trunk line that could cater 16 simultaneous sessions and the assigned Pilot Number for City Hall to make it a fully functional PBX system.

If given the proper technology transfer and trainings CITC personnel could design and expand such technology to the SP and City Hall Annex Buildings and eventually to the district offices if the proper IT infrastructure would be in place.