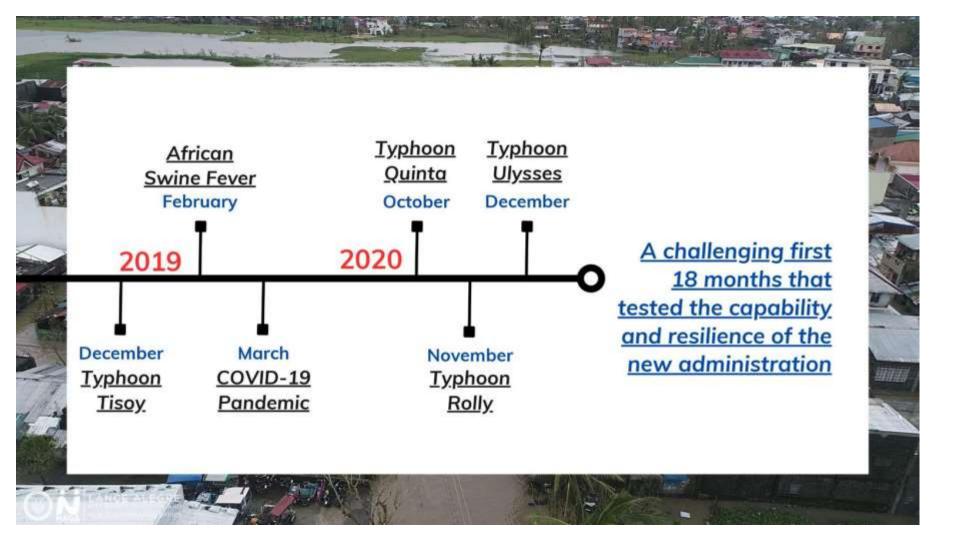
NAGA CITY



Resilient and
Future-Ready
Cities:
Navigating
Natural Disasters
and Building
Stronger
Communities



OUR BEST PRACTICES



Incident Management Teams

- Typhoon IMTs
- ASF IMT
- COVID-19 IMT



Legislative Support

Passage of legislations for the (1) stringent implementation of health protocols, and (2) economic stimulus programs



Community Engagement and Volunteerism

- Debris Clearing Efforts
- · Relief Goods Distribution
- Businesses offering free accommodations and charging stations
- Mobilization of barangay electricians for rapid electrification
- Donations
- · Humanitarian Aid





Upgrading or overhauling the system is not enough. There is a need for investing in a new, modern, and integrated system that will facilitate current and long-term response for recurring problems on traffic management, as well as safety both on occasions of big events and also on a daily basis.

Mayor Nelson Legacion on the establishment of the Naga City Center for Safety and Resilience (CESAR)





THE NAGA CITY CENTER FOR SAFETY AND RESILIENCY (CESAR)



Our Innovations

- Centralization of operations
- Systems
 Automation
- Data-driven management and monitoring





Our Philosophy

- Metrics & Measurements
- Tools and Technology
- Organization and Governance
- Process and procedures
- Skills and Resources
- Physical Environment
- Knowledge Management

A unified command center integrating the functions of offices and agencies involved in public safety, peace and order, and disaster management, for a coordinated response and effective inter-operability among the responders.





CESAR will be housing within its walls the Public Safety Office, the Central Communications Office, and the City Disaster Risk Reduction and Management Office, and sharing in its complex grounds, the PNP and BFP Headquarters.

Command Center



<u>Crisis Room</u> <u>"Mood Board"</u>

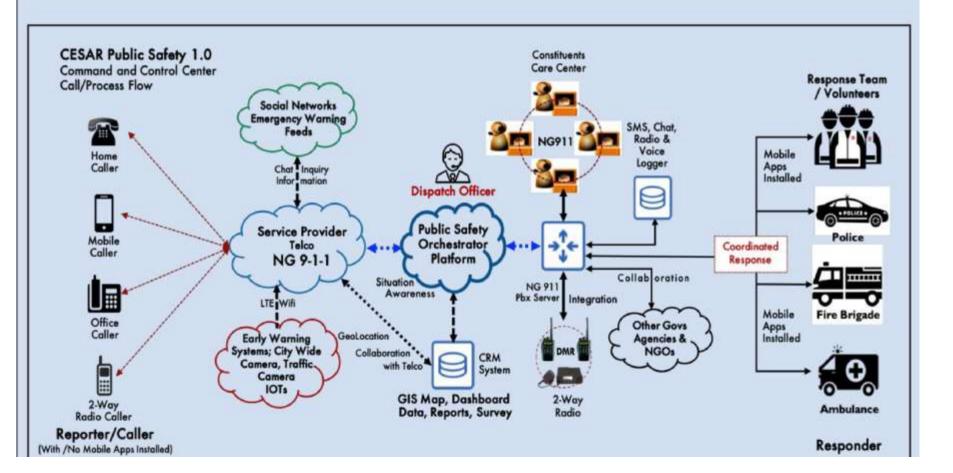
Sensitive and Critical Decisions



Training Room



CESAR TECHNOLOGY ARCHITECTURE

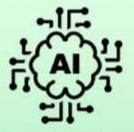


CESAR 1.0 In Action

Critical Events

- Natural Disasters
- Manmade Disasters
- o Civil Unrest
- Public Crisis
- Terrorist Attacks
- Child Abduction
- Missing Person
- Evacuation Orders
- National Orders
- ICTS Outage
- Cyber Issues
- Any Critical Event

Situational Awareness



All Channels, Intelligent
Communication Platform
to Help the City
Government Protecting
Constituents and
Properties When It
Matters

Emergency Communication Channel

Mobile Device



Any Cell Broadcast Channel



Any Location Based



App Notification, SMS, Voice, Radio, Broadcast, Sirens, eMail, Social Network, Digital Signage, Others



CESAR 8 Pillars/ Technology Foundations

Situational Awareness Platform (SAP)

NG 911 Contact Center System

Digital Mobile Radio/2-Way System

Security Surveillance + Al System Social Network System

Smart Traffic System + AI System Geographic Information System

Early Warning System/IoT System Cyber Security System

3 Technology Deployment Methodology

Infrastructure Systems

IoT sensors/ EWS
Structured Cabling Systems
Wired and Wireless Network
Security Surveillance
Smart Traffic Systems
Next Generation Firewall
System
Endpoint Detection and
Response System

ComCen Systems

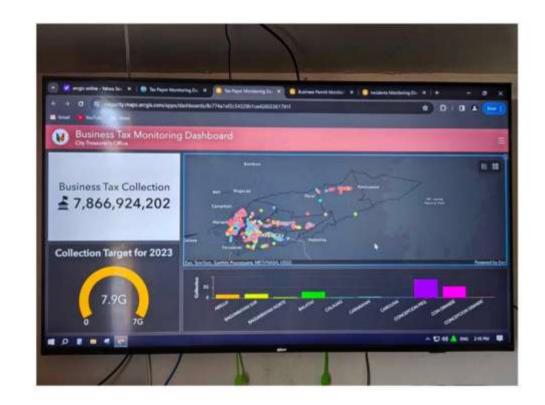
GIS, IoT, and DMR Dashboard System Audio and Video Systems SIP Appliance Telephony System Digital Mobile Radio System Voice, Chat, and Radio, and Screen Logger Al System/Forensic Investigation

Data Center

Social Network Servers and Management System VM Servers Physical Storage and Backup Cloud Storage Integrated Communication Cabinets PACU, fire alarm, sprinkler system Incident Monitoring Dashboard



Business Tax Monitoring Dashboard





Naga City Vision

"A healthy city that is that peaceful, vibrant and productive, safe and smart, green and resilient - driven by excellence and solidarity, enabled by technology, powered by a strong and diversified urban and agricultural economy, and nurture by culture and religious diversity..."