


DARWIN: THIS IS SMART CITIES



**A SMART CITY USES
INFORMATION AND
COMMUNICATIONS
TECHNOLOGY TO
ENHANCE ITS
LIVEABILITY,
WORKABILITY AND
SUSTAINABILITY.**

The Darwin Waterfront

A night view of the Darwin Waterfront. In the foreground, a concrete promenade with a low wall and a row of lights runs along a rocky shoreline. The water is calm, reflecting the lights from the buildings and the sky. In the background, several modern, multi-story buildings are illuminated, their lights reflecting on the water. The sky is a mix of deep blue and orange, suggesting a sunset or sunrise.

” BEING A ‘SMART CITY’ MEANS LEVERAGING THE LATEST DIGITAL TECHNOLOGIES TO MAKE IMPROVEMENTS TO THE LIVES OF DARWIN RESIDENTS...

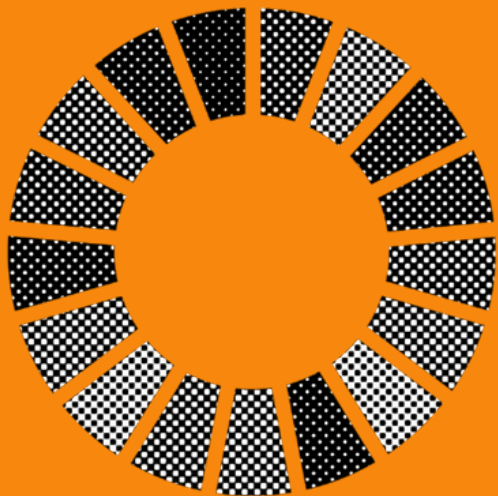
**THE SMART CITIES COUNCIL ACKNOWLEDGES
THE LARRAKIA PEOPLE AS THE TRADITIONAL
OWNERS OF THE DARWIN REGION AND PAY OUR
RESPECTS TO LARRAKIA ELDERS PAST AND
PRESENT. WE ARE COMMITTED TO A POSITIVE
FUTURE FOR THE ABORIGINAL COMMUNITY.**



DARWIN

CAPITAL OF THE NORTHERN TERRITORY

POPULATION :: 147,000
NO. OF BUSINESSES :: 10,300
BROADBAND INTERNET AT HOME :: 63.5%
2019 CRUISE SHIP ARRIVALS :: 73
STREET ART MURALS :: 157
INNOVATION HUB START-UPS :: 103
CLIMATE :: TROPICAL
TRADITIONAL OWNERS :: THE LARRAKIA
PEOPLE



SMART CITIES FOR OUTCOMES

SMART DARWIN

Attracting investment and stimulating sustainable economic development in the city | Enhancing community engagement and participation in the city's development | Developing a digitally enabled city that enables local businesses to grow and attract new residents | Improving data-driven, evidence-based decision making by council to enhance transparency | Balancing the demand on natural resources ensuring the natural environment is protected | Improving operational efficiencies and management of council's infrastructure and assets | Leveraging grants and external funding to ensure ratepayer dollars go further | Addressing social inclusion and cultural diversity, enabling community and economic participation | Enhancing liveability through innovative environmental and urban greening and cooling practices | Enhancing resilience to natural disasters and other events.

SMART CITIES, ACCELERATED

City of Darwin has rolled out its first phase of technology and infrastructure. This first wave of enabling technology and infrastructure is supporting the City's transition to a data-driven, people-oriented city that values and enables collaboration, innovation and participation.

It is just the first step of the journey towards implementing the #SmartDarwin Strategy.

SMART LIGHTING

Target: to upgrade all 9,500 streetlights by April 2021
Status: upgraded 912 street lights under phase 1.

47%

reduction in greenhouse
gas emissions from smart
LED upgrades.

ENVIRONMENTAL SENSING

Microclimate and environmental sensors including: humidity,
wind speed and direction, rainfall, CO2, NO2, O3,
temperature, noise levels and dust levels.

FREE PUBLIC WI-FI

Wi-Fi is a significant enabler of digital connectivity and public space activation, garnering over 8,000 unique connections. Encouraging people to spend time in the city leads to increased engagement with local businesses, use of green spaces and further tourism opportunities.

SMART PARKING

Smart parking sensors enable Council to have an improved understanding of parking usage in the city centre and to develop parking strategies to ease congestion. There have been over 280,000 parking sessions recorded, and a large uptake of a payment alternative, PayStay, allowing Council to remove physical parking meters.

The City Intelligence Platform is a gateway for Open Data – supporting small businesses, organisations and citizen scientists to be innovative in new and exciting ways.

CITY INTELLIGENCE PLATFORM

SMART WAYFINDING KIOSKS

The installation of digital wayfinding kiosks is not only providing on-demand information about the city and its services and events, it is an interface that allows the community and visitors to interact with council. The kiosks also serve as a critical place activation tool, and economic development platform.



A CORE FUNCTION OF THE SMART CITY IS TO COLLECT, COMMUNICATE AND CRUNCH DATA.

FIRST, THE CITY COLLECTS INFORMATION ABOUT ITSELF THROUGH SENSORS, OTHER DEVICES AND EXISTING SYSTEMS.

NEXT, IT COMMUNICATES THAT DATA USING WIRED OR WIRELESS NETWORKS TO A PLACE WHERE IT CAN BE SAFELY STORED.

THIRD, IT "CRUNCHES" (ANALYSES) THAT DATA TO UNDERSTAND WHAT'S HAPPENING NOW, AND WHAT'S LIKELY TO HAPPEN NEXT.

THESE INSIGHTS CAN BE DELIVERED TO THE COMMUNITY TO MAXIMISE THEIR CITY EXPERIENCE.

Smart Kiosk, Smith Street Mall, Darwin CBD

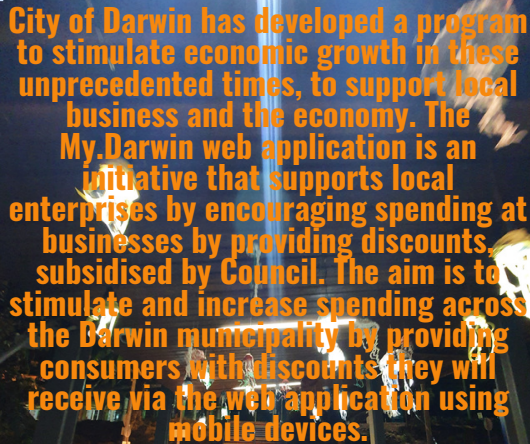
**TECHNOLOGY AND DATA WILL
INFORM EVIDENCE-BASED
PLANNING AND DESIGN TO
ENHANCE THE LIVEABILITY OF OUR
CITY** NEW DATA SETS AVAILABLE TO
THE COMMUNITY AND BUSINESS
SECTOR TO SUPPORT CITIZEN
ENGAGEMENT, UNLOCK INNOVATION
AND CREATE NEW BUSINESS
OPPORTUNITIES **UNDERSTANDING
MOVEMENT THROUGH THE CITY TO
ENSURE THE BEST USE AND
PROVISION OF PUBLIC SPACE**

SWITCHING ON DARWIN | Benefits-driven smart cities investments



THE SMART CITY RESPONDS TO COVID-19

“ We know our local businesses support local jobs so it’s more important than ever that we all work together as a city to rise from this challenge...

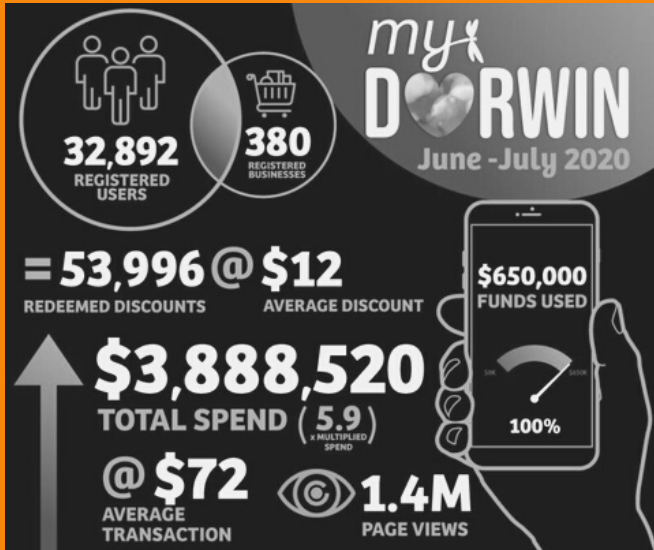


City of Darwin has developed a program to stimulate economic growth in these unprecedented times, to support local business and the economy. The My.Darwin web application is an initiative that supports local enterprises by encouraging spending at businesses by providing discounts, subsidised by Council. The aim is to stimulate and increase spending across the Darwin municipality by providing consumers with discounts they will receive via the web application using mobile devices.



The Darwin Waterfront

THE MY.DARWIN WEB APP | As the city went into hibernation from the COVID-19 lockdown, the City of Darwin built and launched the platform in five weeks. In the six weeks following this \$3.8M was pumped back into the local economy through the platform.



BUILD SMART
> **BUY LOCAL**

CIVIC AND STATE SQUARE MASTERPLAN

Every great city has a
lively central heart.

A DARWIN CITY DEAL INITIATIVE





DARWIN CITY DEAL

A PARTNERSHIP FOR A SHARED VISION FOR DARWIN

THE DARWIN CITY DEAL IS A TEN YEAR PLAN TO POSITION DARWIN AS A VIBRANT AND LIVEABLE TROPICAL CAPITAL CITY, SUPPORTED BY A GROWING POPULATION AND DIVERSE ECONOMY.

THE AUSTRALIAN AND NORTHERN TERRITORY GOVERNMENTS, TOGETHER WITH THE CITY OF DARWIN, ARE PARTNERING TO SUPPORT CATALYST PROJECTS TO REVITALISE DARWIN'S CITY CENTRE, AS WELL AS THE PLANNING AND COLLABORATION NEEDED TO SUPPORT DARWIN'S FUTURE GROWTH.

THIS WILL HELP TO UNLOCK INVESTMENT IN DARWIN, GROW ITS POPULATION, BOOST THE VISITOR ECONOMY AND SUPPORT GREATER BUSINESS ACTIVITY.

THE PROJECTS PLANNED UNDER THIS PARTNERSHIP INCLUDE AN URBAN LIVING LAB WITH CSIRO THAT WILL FACILITATE HEAT MITIGATION EXPERIMENTS SUCH AS LIDAR AND DRONE TECHNOLOGY ASSESSING BIO-PHYSICAL IMPACTS SUCH AS HEAT STRESS.

THE GENERATION OF NEW KNOWLEDGE PRODUCTS AND NEW STAKEHOLDER ENGAGEMENT APPROACHES WILL ALSO FEATURE UNDER THE CITY DEAL.

**TRANSFORM
ATIVE
OPPORTUN
ITIES**

DRONE DELIVERY
EMERGENCY SERVICES DRONE
AUGMENTED REALITY
ROAD CONDITION MONITORING
AUTONOMOUS VEHICLES
COMMUNITY APP DEVELOPMENT

Smart**Cities**
ACTIVATOR

**SMART CITIES STRATEGIES IN A
'LIVING PLATFORM' WHICH
FACILITATES SHARING,
INTERACTION AND RIGOUR.**



THE PATH IS BRIGHT

The City of Darwin and its stakeholders have allowed its peer cities and the broader industry to learn from its doing.

The Switching on Darwin project has shown us what is possible with significant collaboration, from all tiers of government, and industry partners.

It has also shown us how clear community outcomes can be a framework for directing investment into technology and data solutions.

And with Darwin's smart cities capability and initial investment in smart infrastructure, we witnessed the rapid deployment of the My.Darwin application to accelerate the City's economic recovery from the COVID-19 pandemic - again demonstrating the City's use of technology and data to drive prosperity.

Take a deeper virtual and immersive tour of this smart city [here](#) using the VR app.

This is smart cities. This is Darwin.

Smart
Cities
Council

smartcitiescouncil.com