SMART TECHNOLOGY

CITY OF PLANO



Plano

City of Excellence

THE FUTURE IS NOW

THE INTERSECTION OF TECHNOLOGY AND INTELLIGENT CONNECTIVITY HELPING TO SOLVE REAL WORLD PROBLEMS

TECHNOLOGY + CONNECTIVITY + SUBJECT MATTER EXPERTS + COMMUNITY = SMART CITIES

DEFINING

REQUIRES A CHANGE IN THE WAY WE THINK ABOUT DEPARTMENTS, ACTIVITIES, AND FUNCTIONS

REQUIRES A CHANGE IN OUR CULTURE

REQUIRES A CHANGE IN HOW WE DO BUSINESS

REQUIRES

IT IS NOT – A TYPE OF TECHNOLOGY
IT IS NOT – A SERVICES USED
IT IS NOT – A BRAND, MANUFACTURER, or COMPANY

IT IS – MAKING DATA INFORMATIONAL
IT IS – INFORMATION SHARED ACROSS DEPARTMENTS
IT IS – INFORMED INTERACTION WITH THE COMMUNITY
IT IS – CYCLIC AND ITERATIVE, BI DIRECTIONAL IN NATURE

IS / IS NOT

- Artificial Intelligence and Machine Learning
- 5G
- Block Chain, Smart Contracts, and Digital Currency
- Industrial IOT
- Robotics/Drone
- Assisted Transportation
- Assisted and Virtual/Augmented Reality

- **Business Intelligence**
- **Traffic Management**
- **Smart Utilities and Facilities**
- **AI to Manage Technology Systems**
- **Public Safety**

CURRENTLY USED

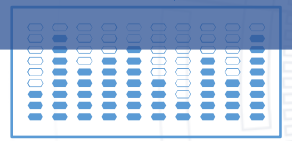
BUSINESS INTELLIGENCE

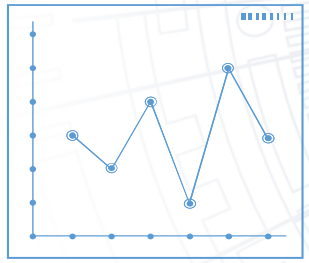
The modern day digital revolution places pressure on organizations to deliver better service, faster, and more cost effectively.

Making data informational provides the largest return on investment of any of the current approaches to smart technology implementations.

Allows us to gain insights to knowledge that is not evident in traditional reporting.

Allows insights to emerge that help make better, more data driven decisions.









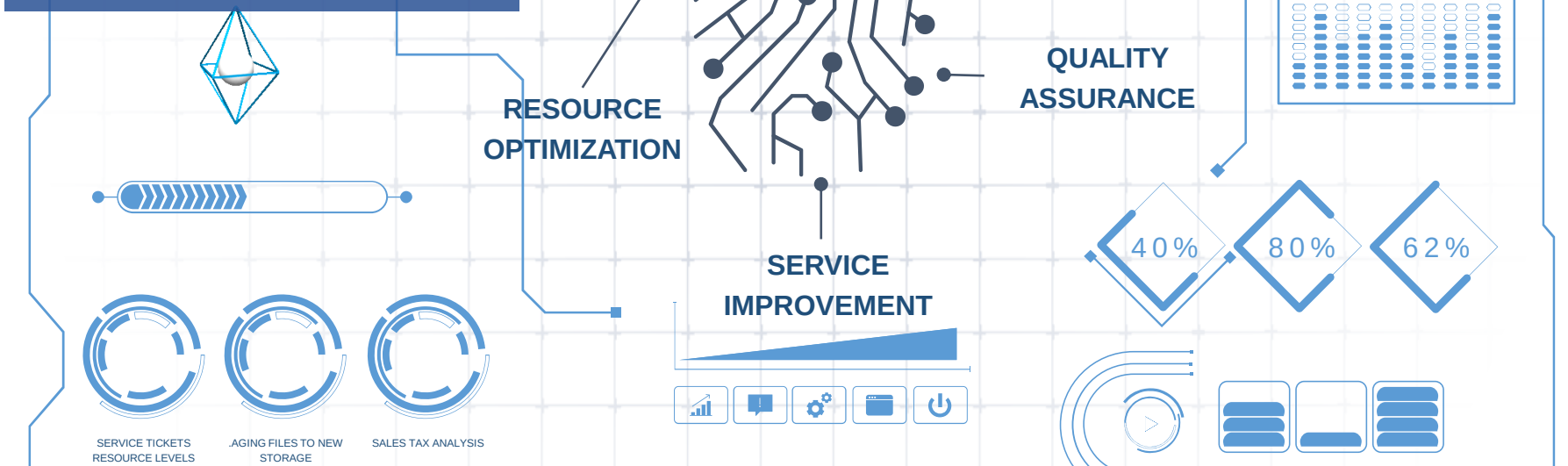






BUSINESS INTELLIGENCE

The benefits are many, but decisions based upon better information and transparency are strong drivers.



TRAFFIC

Many startups have entered the techno- sphere, with promises of decreasing traffic and congestion. The City has been implementing various technologies to help with this community need.

WAZE INTEGRATION

The City has finished bi-directional integration with WAZE and is beginning the data discovery phase of the initiative. We are currently looking to develop insights from the data to make it more informational and predictive.

SMART PARKING

The City is currently looking into technologies to help with traffic. Evaluation of existing technologies, new hardware and software, and future state processes are all being considered.

VEHICLE UPLOAD

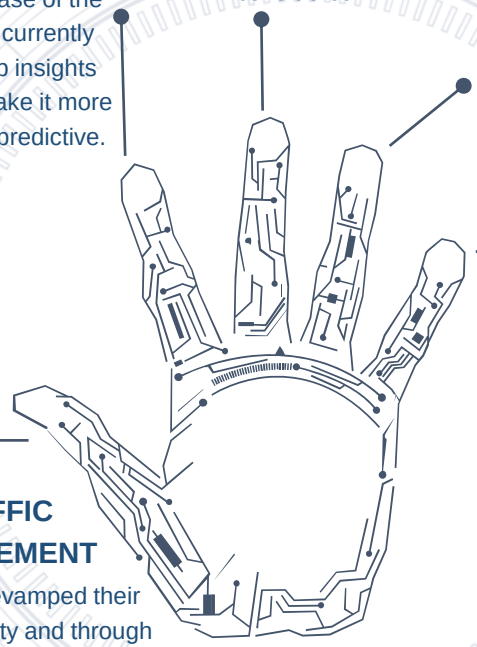
Technology Services has partnered with Traffic and Engineering to upload traffic signal data to vehicle manufactures to use in their in car GPS technologies..

AUTONOMOUS

The City is investigating technological, land and space, and human factors revolving around autonomous vehicles.

TRAFFIC MANAGEMENT

The City has revamped their traffic connectivity and through a partnership with traffic management, are working on ways increase mobility.



SMART UTILITIES AND FACILITIES

The City is utilizing a wide array of technologies that make sense, decrease cost, and increase productivity.

METERS

The City uses wireless meter technologies to read meters remotely. We are in the process of upgrading the technology to leverage LTE and allow for better management of the data.

IRRIGATION

The City is moving off of antiquated sprinkler management systems and is moving to solutions that decrease cost and leverage LTE services.

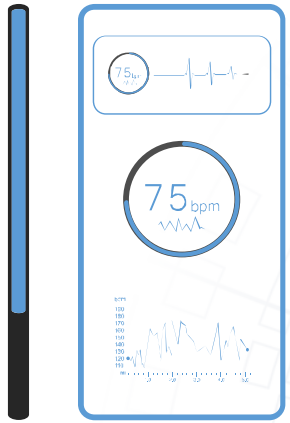
BUILDING

The City manages its electrical and HVAC systems using technologies that decrease cost and increase productivity.

CAMERAS

The City is currently in the process of implementing new camera technologies that centralize storage and management, decrease redundancy, decrease video size in flight, and offers future predictive capabilities.





REDUCE MANUAL LABOR

MANAGE BY KPI

INVEST ON NEED

INFRASTRUCTURE

LOGGING

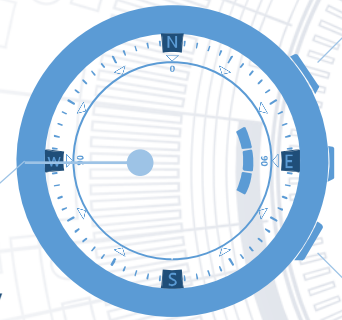
APPLICATIONS

AI

MACHINE LEARNING

AUTOMATION

AI in Technology Services



AI BASED SECURITY TRAINING

FIREWALLS

SELF HEALING INFRASTRUCTURE

PREDICTIVE FAILOVER

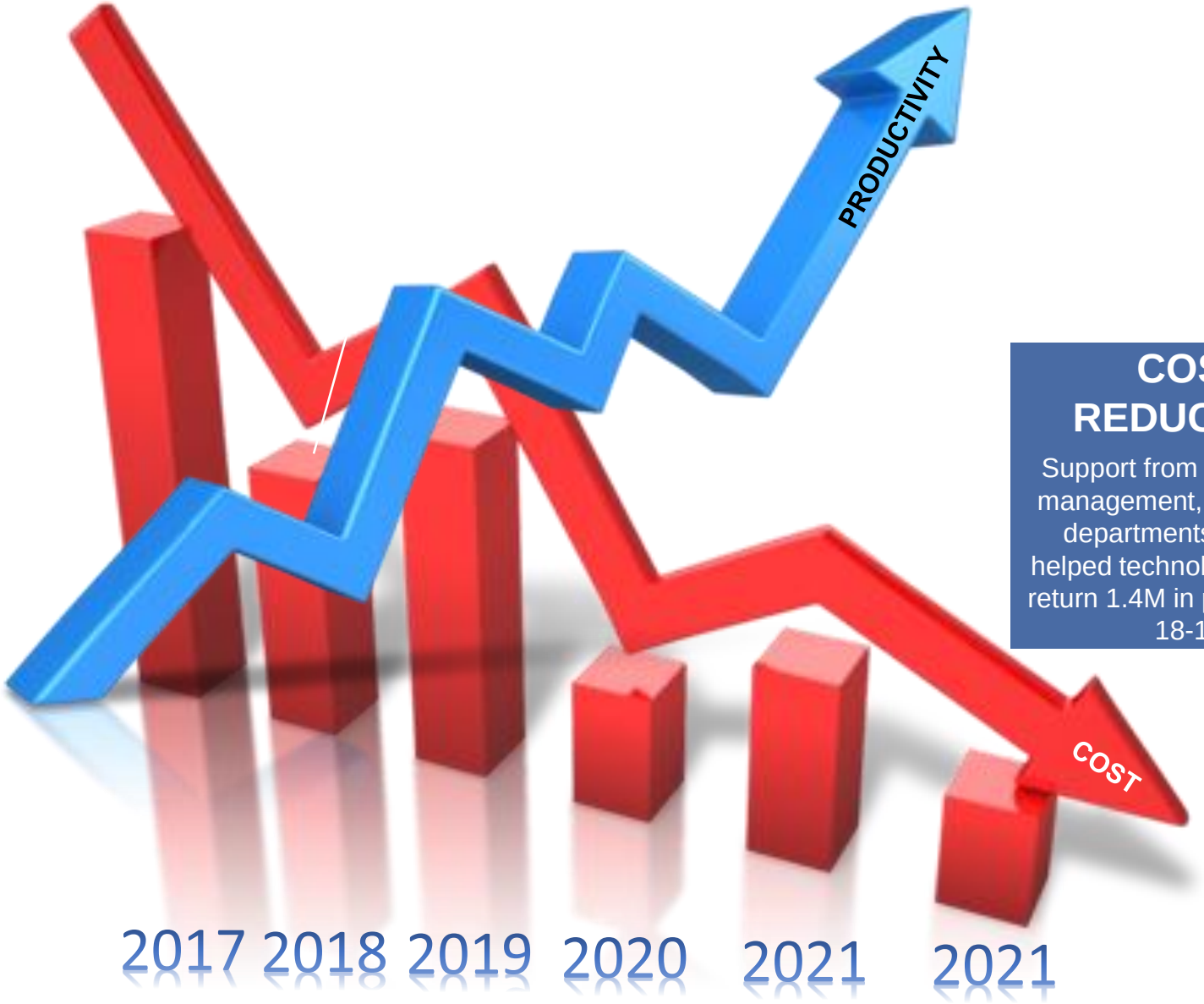
APPLICATIONS

CLOUD

TECHNOLOGY SYSTEMS

Technology Services manages most technology within the City. From applications through security, we are deploying systems to reduce cost , increase productivity, reduce manual processes and build artificial intelligence/deep learning into the City’s operations.

TECHNOLOGY SERVICES



COST REDUCTION

Support from council, city management, and various departments staff has helped technology services return 1.4M in physical year 18-19.

PUBLIC SAFETY

Many technologies are being put in place to help make our communities safer. Not all technologies being implemented can be disclosed, but public safety technologies are advancing quickly.

TURN BY TURN

Turn-by-Turn traffic automation, that is integrated with our computer aided dispatch systems, has been deployed to all public safety vehicles.

CRIME ANALYTICS

Predictive crime analytics helps the police make data more informational and identify trends, patterns, and probabilities.

DRONES

Several drone pilots support a variety of functions in the City, specifically helping to create a safer response for our first responders.



LPR

Technology used to help locate stolen vehicles, warrants, and other investigative practices.

DATA MINING

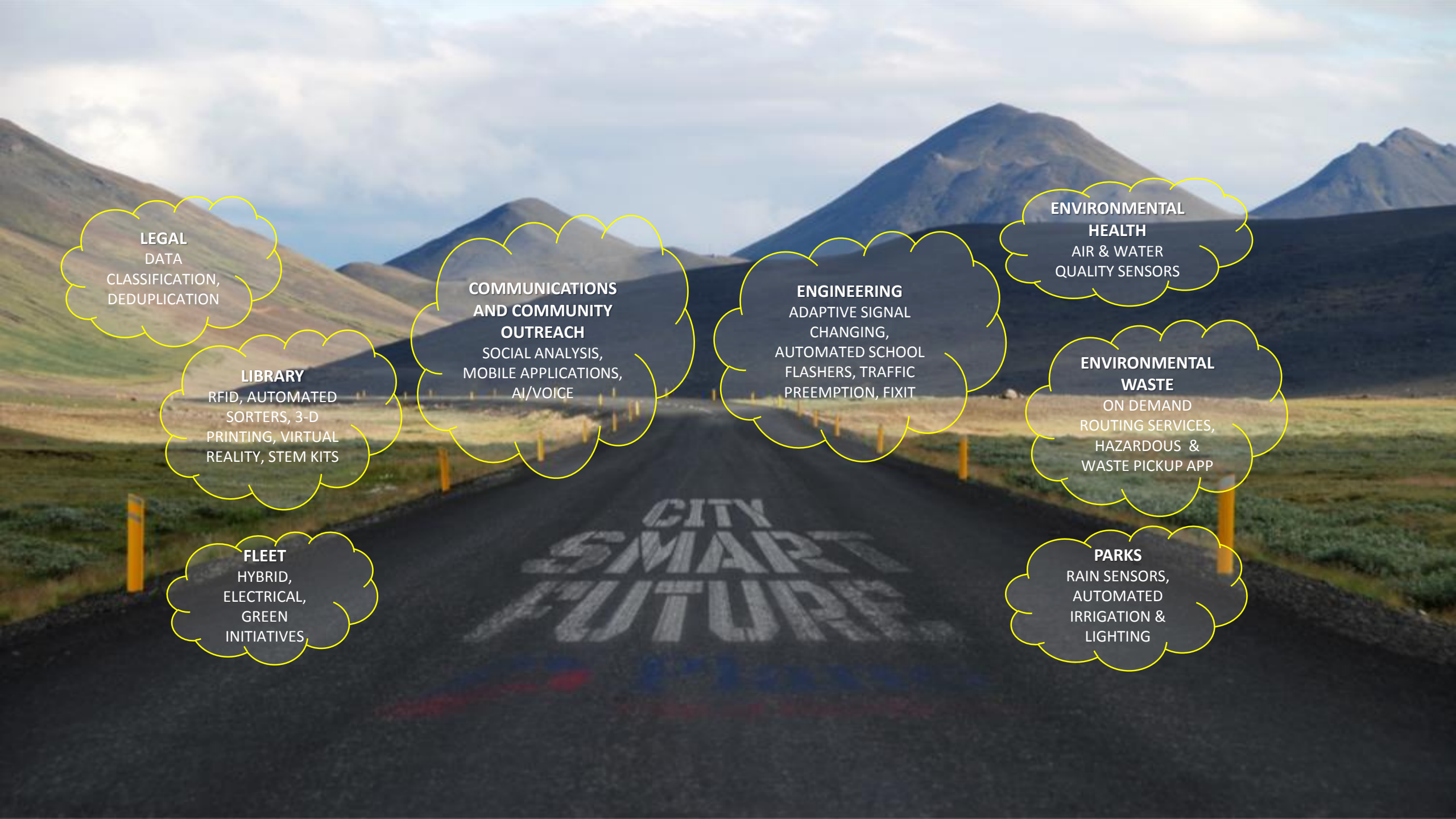
Discovering patterns of behavior and using the information to make better decisions.

PULSE POINT

Free app for CPR certified individuals that are alerted to CPR related events in public places and displays the locations of AFD's. (**Update: Verified First Responder can receive alerts to any CPR related calls)**

BODY CAMERAS

Body cameras, storage, and other technologies have been deployed to help protect officers and better understand events.


LEGAL
DATA CLASSIFICATION, DEDUPLICATION
LIBRARY
RFID, AUTOMATED SORTERS, 3-D PRINTING, VIRTUAL REALITY, STEM KITS
FLEET
HYBRID, ELECTRICAL, GREEN INITIATIVES
COMMUNICATIONS AND COMMUNITY OUTREACH
SOCIAL ANALYSIS, MOBILE APPLICATIONS, AI/VOICE
ENGINEERING
ADAPTIVE SIGNAL CHANGING, AUTOMATED SCHOOL FLASHERS, TRAFFIC PREEMPTION, FIXIT
ENVIRONMENTAL HEALTH
AIR & WATER QUALITY SENSORS
ENVIRONMENTAL WASTE
ON DEMAND ROUTING SERVICES, HAZARDOUS & WASTE PICKUP APP
PARKS
RAIN SENSORS, AUTOMATED IRRIGATION & LIGHTING
CITY
SMART
FUTURE

A PUBLIC - PRIVATE
PARTNERSHIP IS
NEEDED TO HELP DESIGN, DEVELOP, AND
FUND OUR SMART COMMUNITY
SUPPORTING
CLEARLY DEFINED BUSINESS PURPOSES

MOVING FORWARD SMART CITY

TECHNOLOGY + CONNECTIVITY + SUBJECT MATTER EXPERTS + COMMUNITY = SMART CITIES



Technology Services
Procurement
Project Management

All Departments

Companies
&
Citizens

Civic
Engagement

Questions