MID-OHIO REGIONAL
MORPC
PLANNING COMMISSION

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NOTICE OF A MEETING
SMART REGION TASK FORCE
MID-OHIO REGIONAL PLANNING COMMISSION
111 LIBERTY STREET, SUITE 100, COLUMBUS, OHIO 43215
SCIOTO CONFERENCE ROOM

July 9, 2019, 2:00 pm – 3:30 pm

AGENDA

1. **Welcome –** *Joe Stefanov, SRTF Vice Chair*

2. **Smart Region Updates –** *Aaron Schill, MORPC*

3. **SmartColumbus Operating System** –
   Mackenzie King, Accenture; Mandy Bishop, City of Columbus

4. **Work on Deliverables**
   a. **Smart Streets Policy Status Update – Discuss Local Adoption –**
      Joe Stefanov, SRTF Vice Chair
   b. **Smart Region Playbook** – *Aaron Schill, MORPC*

5. **Other Business** – *Joe Stefanov, SRTF Vice Chair*

6. **Adjourn –** *Joe Stefanov, SRTF Vice Chair*

Please notify Lynn Kaufman at 614-233-4189 or LKaufman@morpc.org to confirm your attendance for this meeting or if you require special assistance.

The next Smart Region Task Force meeting is
September 10, 2019, 2:00 p.m. – 3:30 p.m.
111 Liberty Street, Suite 100, Columbus, Ohio 43215

PARKING AND TRANSIT: When parking in MORPC's parking lot, please be sure to park in a MORPC visitor space or in a space marked with a yellow “M”. Handicapped parking is available at the side of MORPC’s building.
MORPC is accessible by CBUS. The closest bus stop to MORPC is S. Front Street & W. Blenkner St. Buses that accommodate this stop are the Number 61 - Grove City, the Number 5 - West 5th Ave. /Refugee, and the Number 8 - Karl/S. High/Parsons. One electric vehicle charging station is available for MORPC guests.

SMART COLUMBUS

Smart Columbus Operating System

Mission & Vision
Timeline, Roadmap
Intro to Data Platform 2.0
Beyond the Tech
Going Open Source


ACCELERATION
PARTNER PROGRAM
IF YOU WANT TO GO FAR, GO TOGETHER
SMRT
COLUMBUS

SMART COLUMBUS ACCELERATION PARTNER

Public Sector

1 SENIOR POINT OF CONTACT	2 ELECTRIFY YOUR FLEET	3 EXPAND CHARGING INFRASTRUCTURE	4 SMART MOBILITY EDUCATION	5 INCENTIVIZE BEHAVIOR CHANGE
6 ENHANCE ACCESS TO OPPORTUNITY	7 COMMIT TO SUSTAINABLE ENERGY	8 SHARE DATA W/ SMART COLUMBUS OPERATING SYSTEM	9 ALIGN SMART CITIES INVESTMENTS TO ACCELERATION FUND	10 CREATE NEW OPPORTUNITIES

MEET WITH SMART COLUMBUS / SET MEASURABLE GOALS / UPDATE & SET POLICY / SHARE LEARNINGS VIA PLAYBOOK

SMRT COLUMBUS

SMART COLUMBUS

MISSION & VISION

THE OS IN REFERENCE TO THE USDOT SMART CITY CHALLENGE

MISSION

To demonstrate how an intelligent transportation system and equitable access to transportation can have positive impacts on everyday challenges faced by cities.

SAFETY

MOBILITY

OPPORTUNITY

ENVIRONMENT

AGENCY EFFICIENCY

CUSTOMER SATISFACTION


SMRT COLUMBUS
OPERATING SYSTEM
DATA STORAGE & CURATION
PUBLISH
AGGREGATE
CONSUME
FUSE
VISUALIZE
DATA
AMERICAN ELECTRIC POWER
OHIO STATE
BUS
THE CITY OF COLUMBUS
Ohio Department of Education

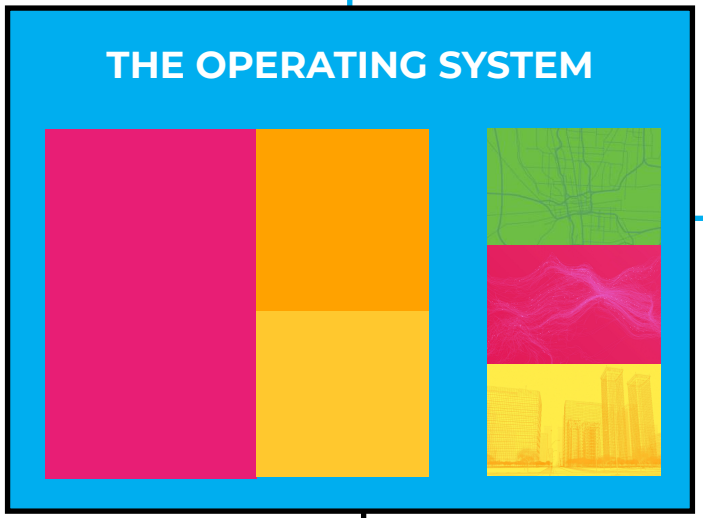
OPERATING SYSTEM BIG PICTURE

Data Inputs

- Workers
- Citizens
- Public & Private Systems
- Devices & Things

Data Capture & Analysis

Data Scientist & Researchers

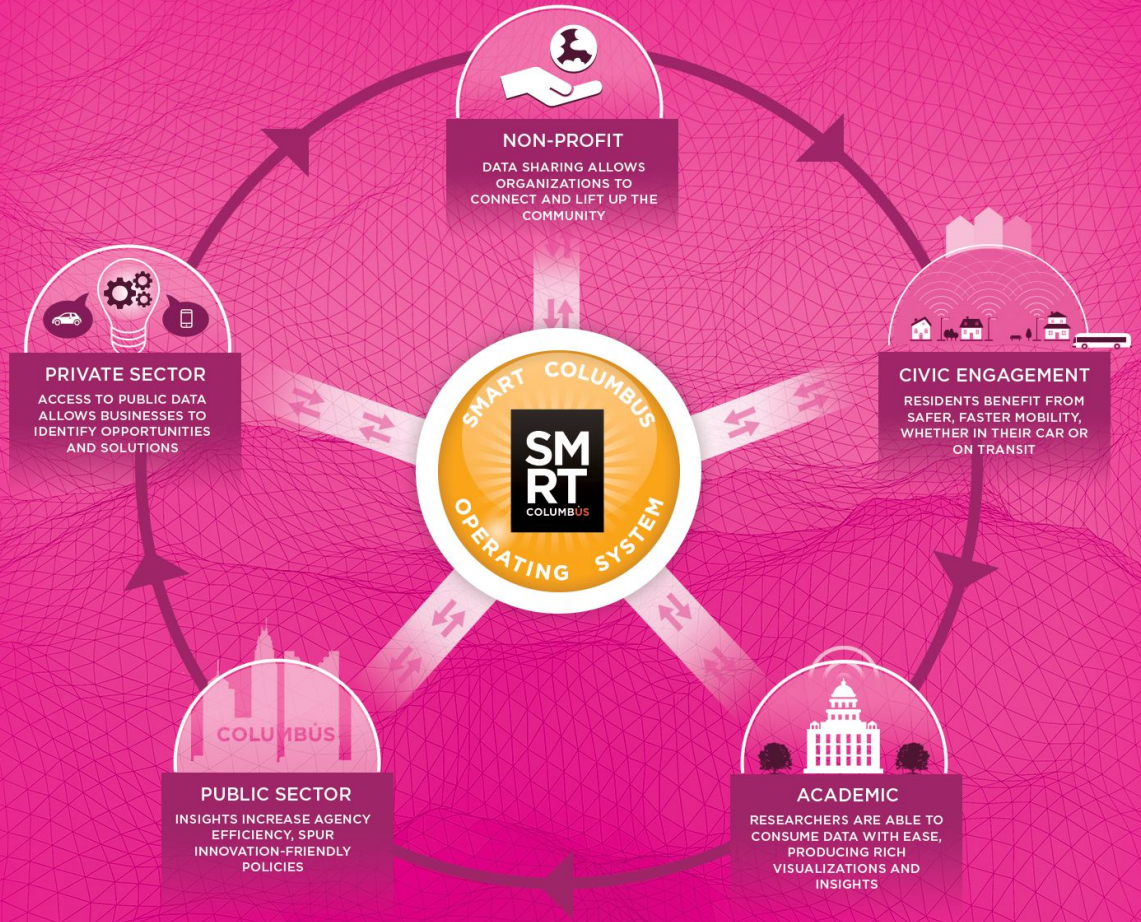


Application hosting and connectors to other systems

Data Consumption

- Public
- Entrepreneur
- Universities
- Commercial Partners
- City
- USDOT
- Independent Evaluators

THE SMART COLUMBUS OPERATING SYSTEM



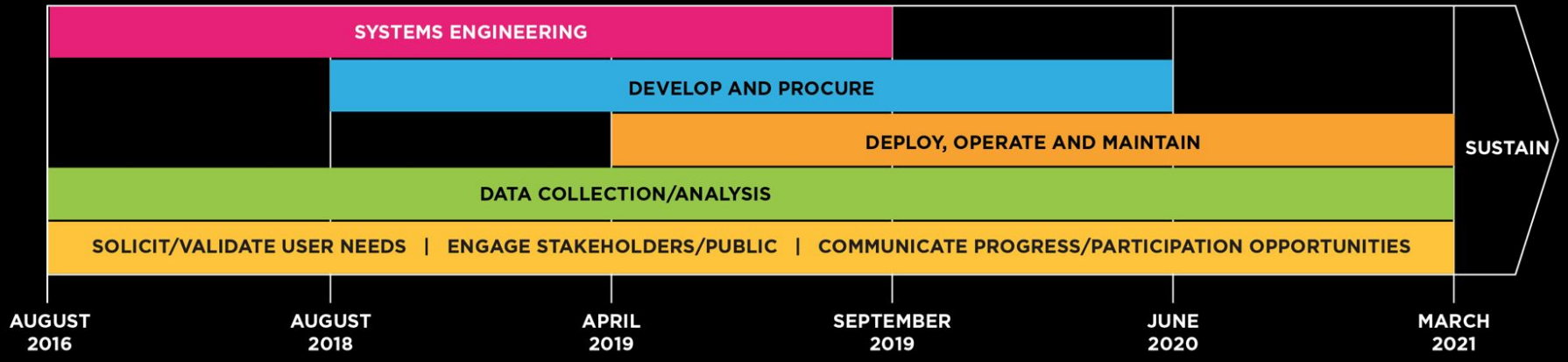
SMRT COLUMBUS

TIMELINE & ROADMAP

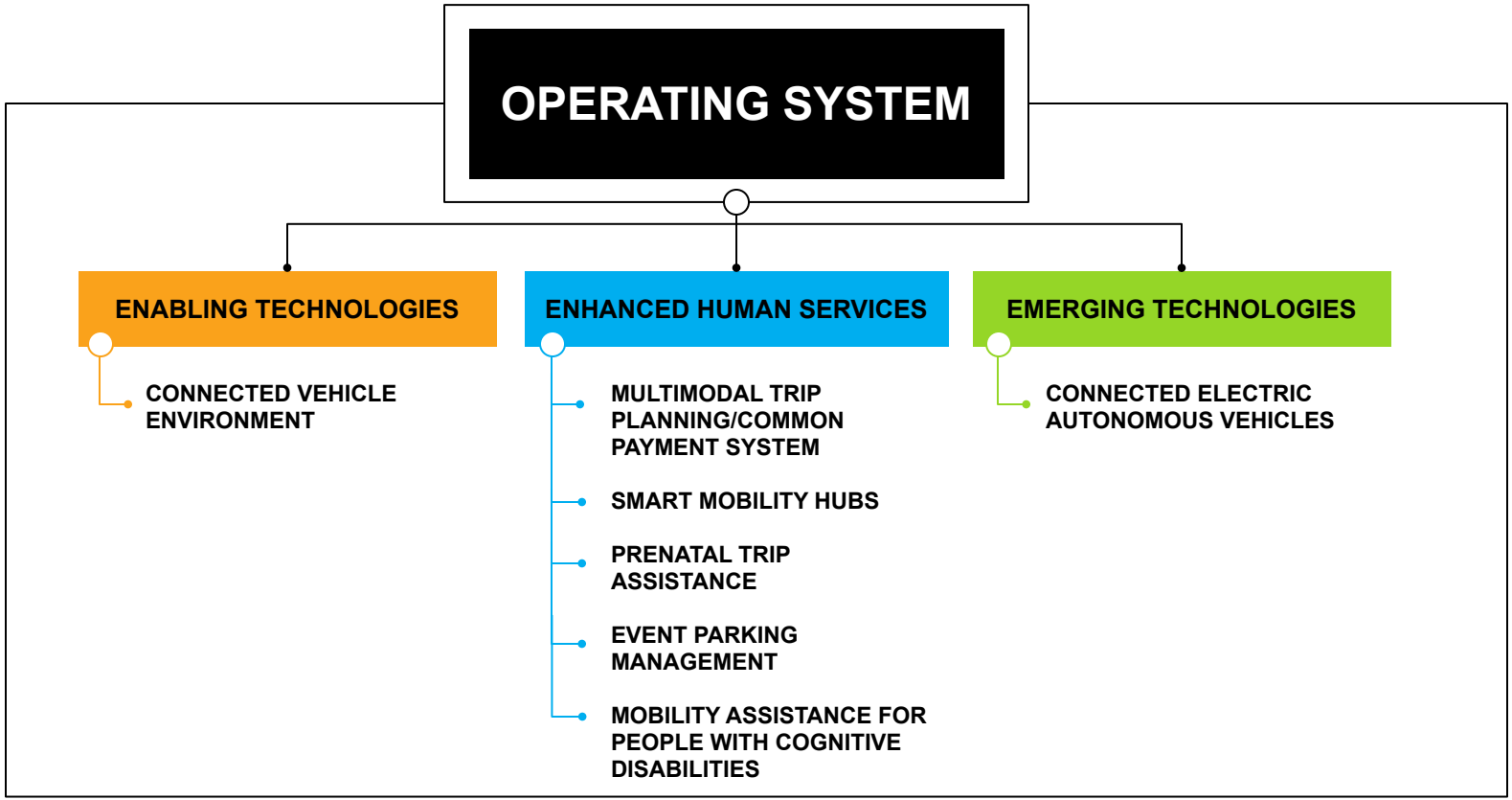
BIG PICTURE OF PROGRAM, VS. DAY-TO-DAY AGILE DEVELOPMENT

SMART COLUMBUS

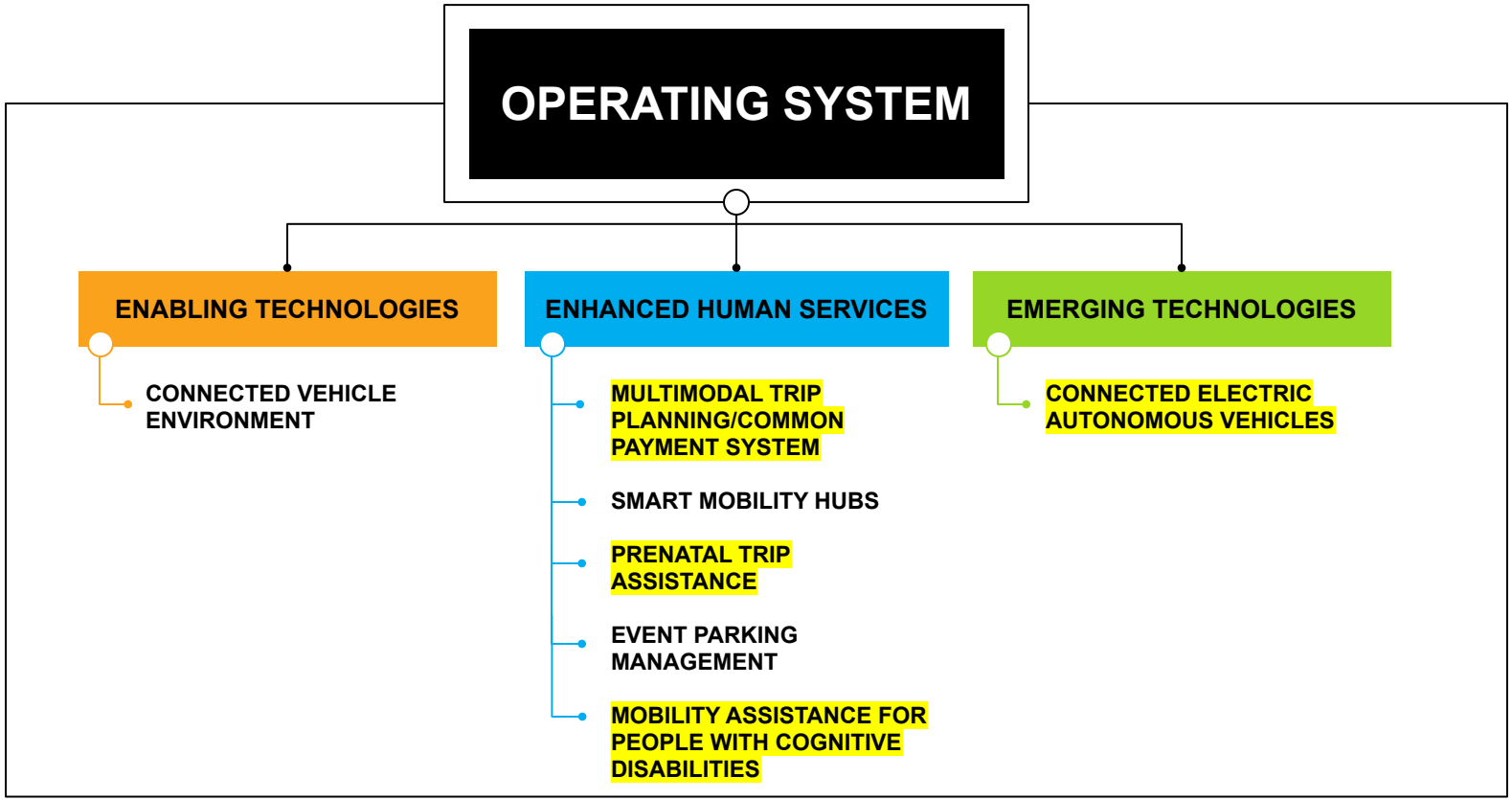
PROGRAM PHASES & TIMELINE



USDOT PROJECT PORTFOLIO



USDOT PORTFOLIO



SMRT COLUMBUS

DATA PLATFORM

CAPABILITIES & ARCHITECTURE

WHY SHIFT FROM 1.0 PLATFORM TO 2.0?

INSIDE OUR DATA PLATFORM 2.0

DATA PLATFORM 1.0

April 2018–April 2019

Data Storage +

Built using 'CKAN' platform

DATA PLATFORM 2.0

April 2019–Future

User Interface	*Flexible Interfaces for Discover & Use*
Data Exchange	*Pipeline Scalability*
Data Storage	*Operational Efficiencies*

Built loosely-coupled, custom-designed microservices using Elixir programming language

OVERVIEW OF DATASETS

3k+ Data Sets

Vetted High Quality

Privacy & Security

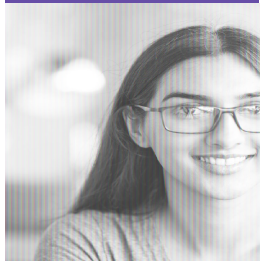
- **Dataset Examples:** Traffic Characteristics, City Infrastructure Inventory, Crash Records, Weather Readings, Emergency Response Times, Food Services, Parking Locations, Health behaviors, Real-time Vehicle Location Feeds. ***(Select vehicle location dataset feeds stream in near-realtime)***
- **Formats:** .CSV, .GeoJSON, .JSON *(XML and Shape Files coming soon – currently available as remote datasets)*
- **Supports:** Use cases that solve distinctive challenges experienced in the Central Ohio region
- **Standardization:** Metadata is curated in compliance with Project Open Data standards, to maximize machine readability and utility

SMRT COLUMBUS

UNDERSTANDING USERS' NEEDS

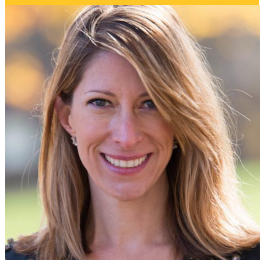
PERSONAS

CLAIRE
DATA CURATOR



ANDY
SYSTEM ADMINISTRATOR

PAIGE
DATA PROVIDER



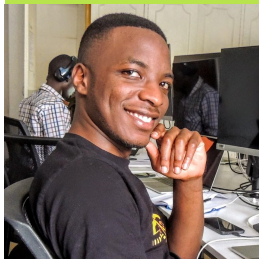
NANCY
NONPROFIT MANAGER

CARLOS
CITY AGENCY MANAGER

ALLAN
ACADEMIC

EDDIE
ENTREPRENEUR

DAVE
APPLICATION DEVELOPER



CONNOR
DATA CONSUMER

EVITA
PROJECT EVALUATOR

RACHEL
BUS RIDER

AISHA
APP USER

SMRT COLUMBUS

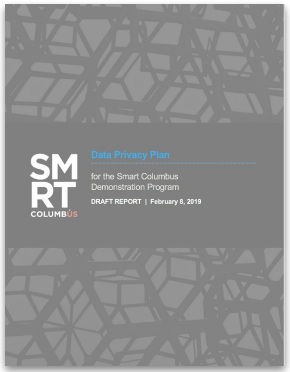
BEYOND TECH

PEOPLE, POLICIES & MORE

WHAT IS THE OS, WHAT GETS TRANSFERED?

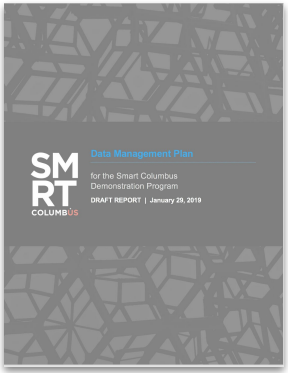
Privacy & Data Management Plans

Data Privacy Plan (DPP)



- Provides high-level guidance, principles and policies to ensure the privacy of Smart Columbus Demonstration data subjects and project participants.
- This document applies to all individuals who use or share data with Smart Columbus, including all Smart Columbus employees, partners and consultants.

Data Management Plan (DMP)



- Documents how the data within the Operating System will be added, made accessible and/or stored within the Operating System platform.
- Details how the data will be created, captured, transmitted, maintained, accessed, shared, secured and archived.

Planning for Post-Grant Operations & Maintenance

Establish operations and maintenance costs at time of transfer

- Operational support costs
- Legal agreements
- Staff
- DMP / DPP support
- etc.

Articulate financial and institutional model to sustain

- Product lines
- Actual revenue
- Projected revenue with confidence
- Investment (schedule, documentation of commitments, etc.)

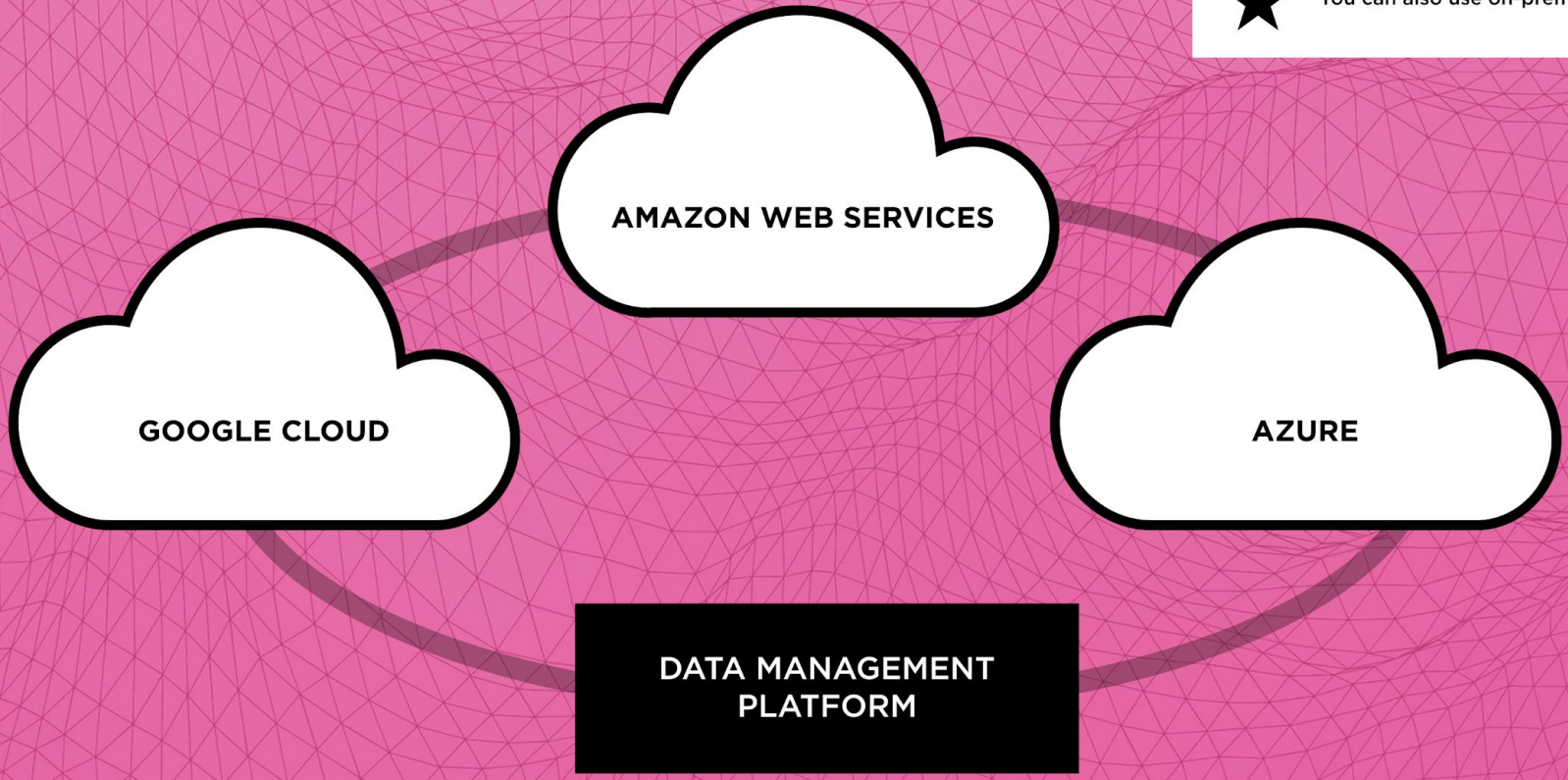
SMRT COLUMBUS

GOING OPEN SOURCE

INTRO & TIMELINE

CLOUD AGNOSTIC PLATFORM

★ You can also use on-premise servers



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3.4. OPEN SOURCE
PHASE 1 & 2

PHASE 2

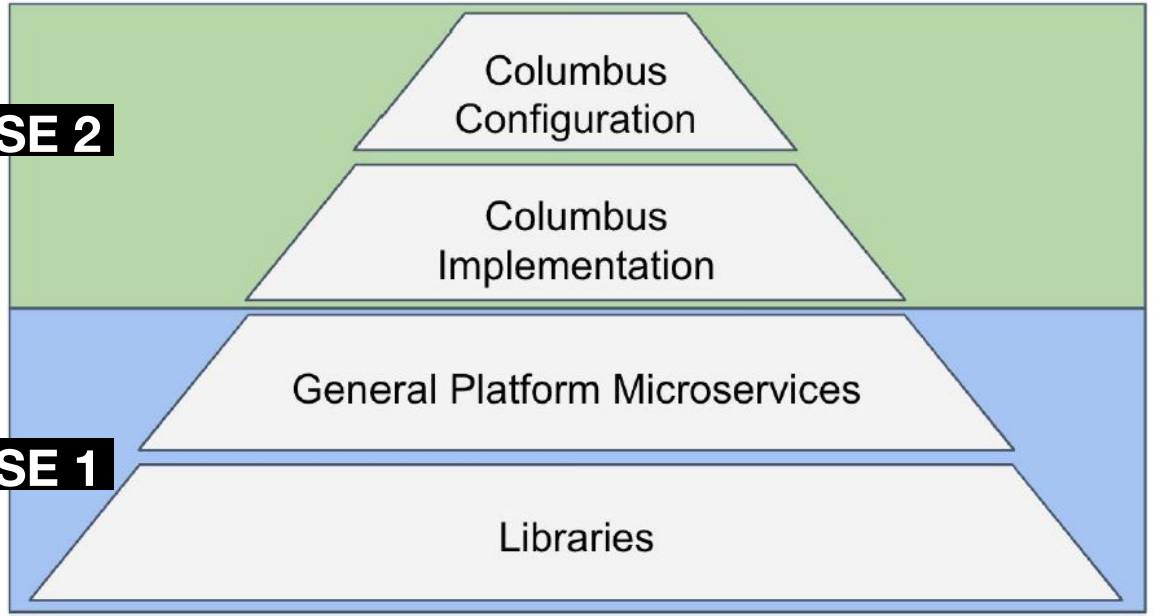
2nd Release, October 20, 2019

Smart Columbus Operating System

PHASE 1

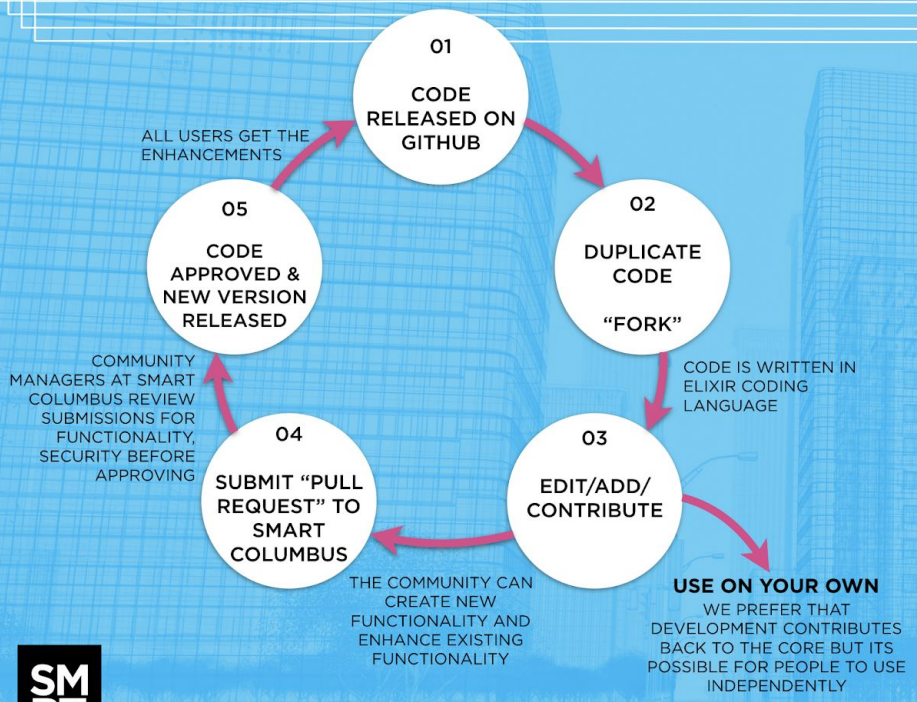
Initial Release, June 18, 2019

Smart Cities Data Platform



OPEN SOURCE CODE

The Smart Columbus Operating System is built with open source code and available for license-free use and enhancement by third parties on GitHub at "SmartCitiesData"



- The general platform is **OPEN SOURCE AS OF JUNE 2019** and is publicly available with Apache 2.0 license
  - In October 2019, Smart Columbus grant project specific components will be released to the Open Source community
- **YOU CAN USE THE CODE** to build their own Smart City Data Platform
- **SMART COLUMBUS WILL OFFER WORKSHOPS** to teach people Elixir coding language and train people to contribute to the code.

THANK YOU.

Visit ***www.smartcolumbusos.com*** to explore currently ingested data.

Program Manager: Mandy Bishop, **mkbishop@columbus.gov**
OS Product Owner: Mackenzie King, *mackenzie.a.king@accenture.com*