



Continental Automated
Buildings Association

30 YEARS

DLC Stakeholder Meeting 2019

Lighting and the Smart Building

Ron Zimmer

CABA President & CEO

St. Louis, MO

April 1-3, 2019

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CABA Board of Directors



CABA Monetization of Intelligent Buildings Report (2018)

Covers Six Key Verticals Within Commercial Buildings



Commercial

- Office Buildings
- Mixed Use



Retail & Hospitality

- Retail
- Hotels & Casinos
- Restaurants
- Banking



Public Venues

- Transport (Airports, Transit Facilities)
- Stadiums
- Other Public Venues



Medical

- Hospitals
- Clinics
- Care Facilities
- Labs



Institutional

- Educational Institutions (K-12; Higher Education)
- Government



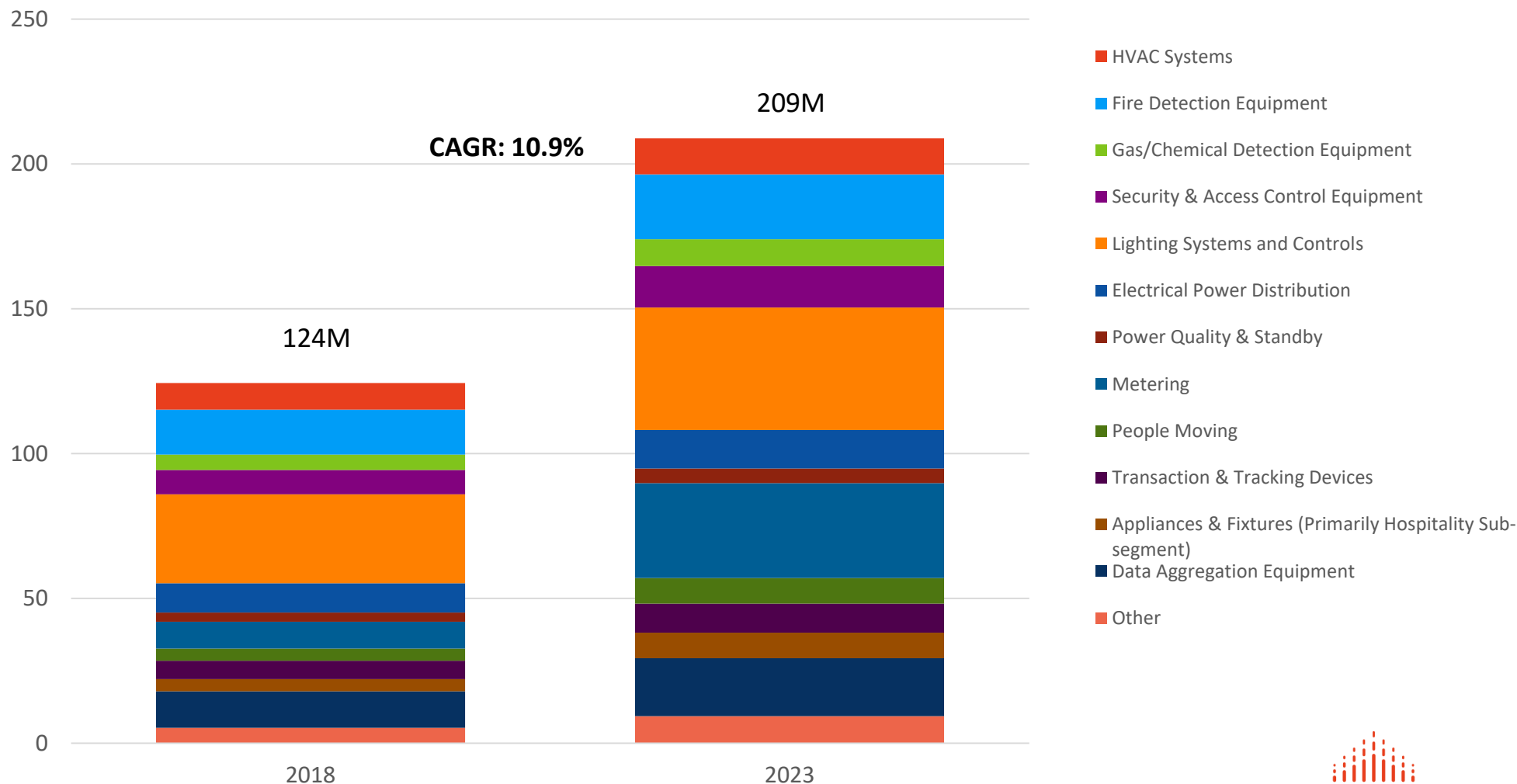
Mission Critical

- Factories & Plants
- Warehouses
- Data Centers

Device Shipments Will Grow at 10.9% Annually



Number of Shipped Devices by Buildings Sub-Segment,
North America 2018-2023 (units, millions)



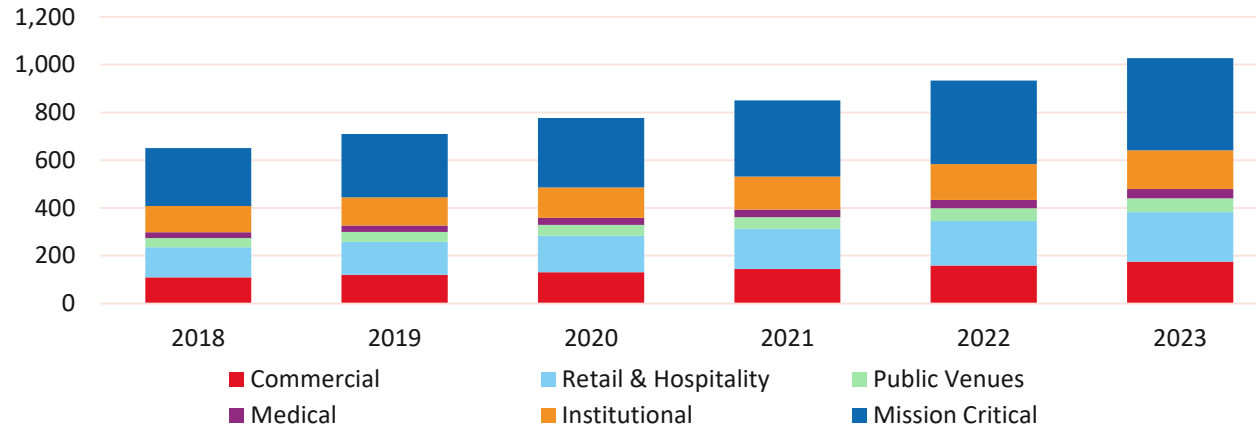
CABA Monetization of Intelligent Buildings (2018)

Device Installed Base Will Reach Just Over 1 Billion Units in 2023

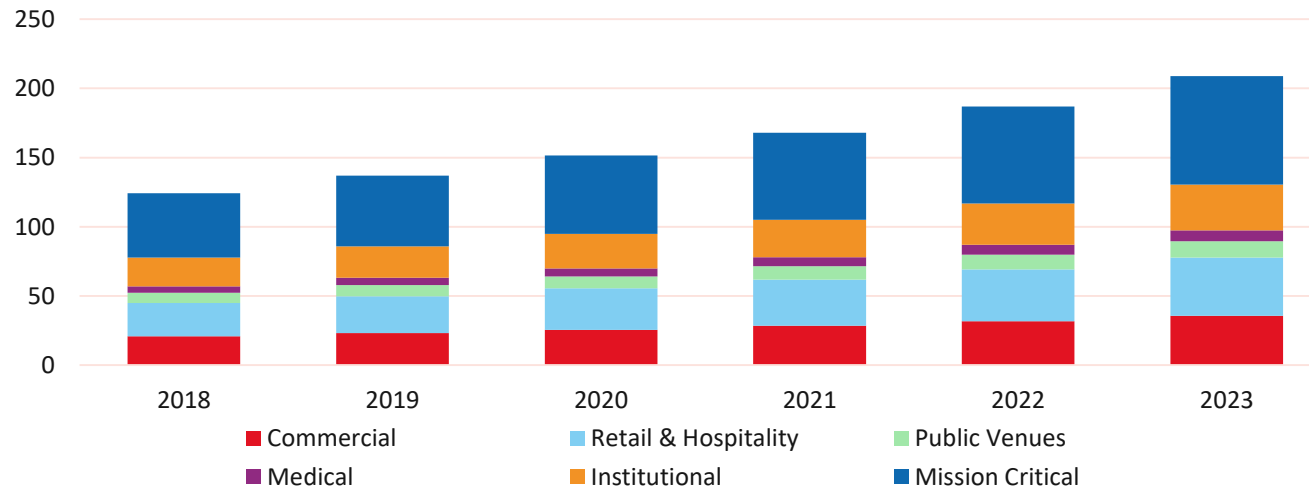
(CABA Monetization of Intelligent Buildings 2018)



**Number of Installed Devices by Buildings Sub-Segment,
North America 2018-2023 (units, millions)**

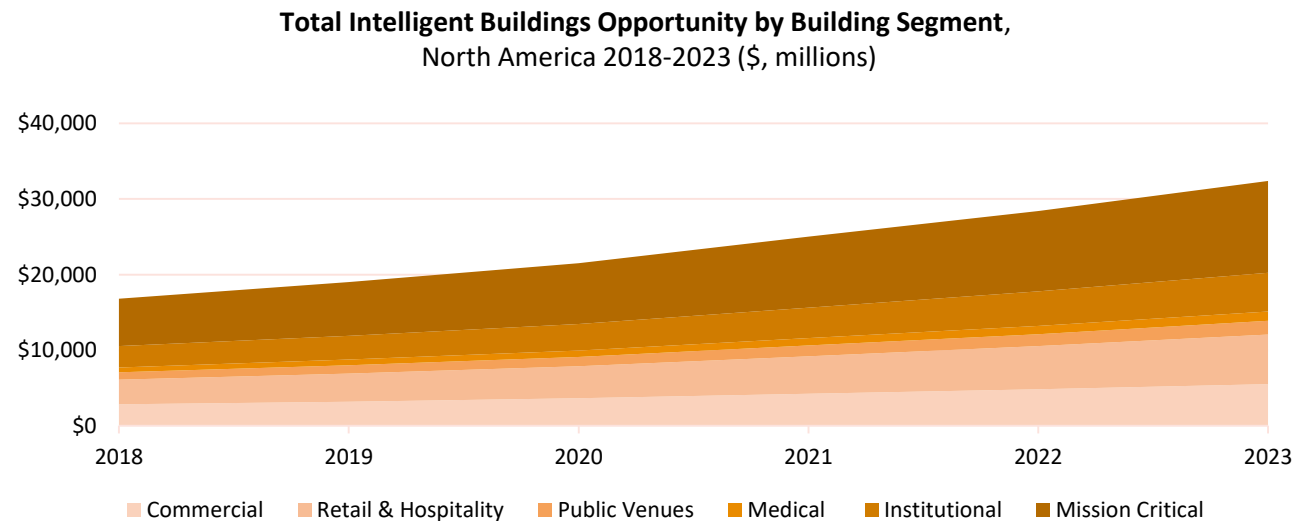
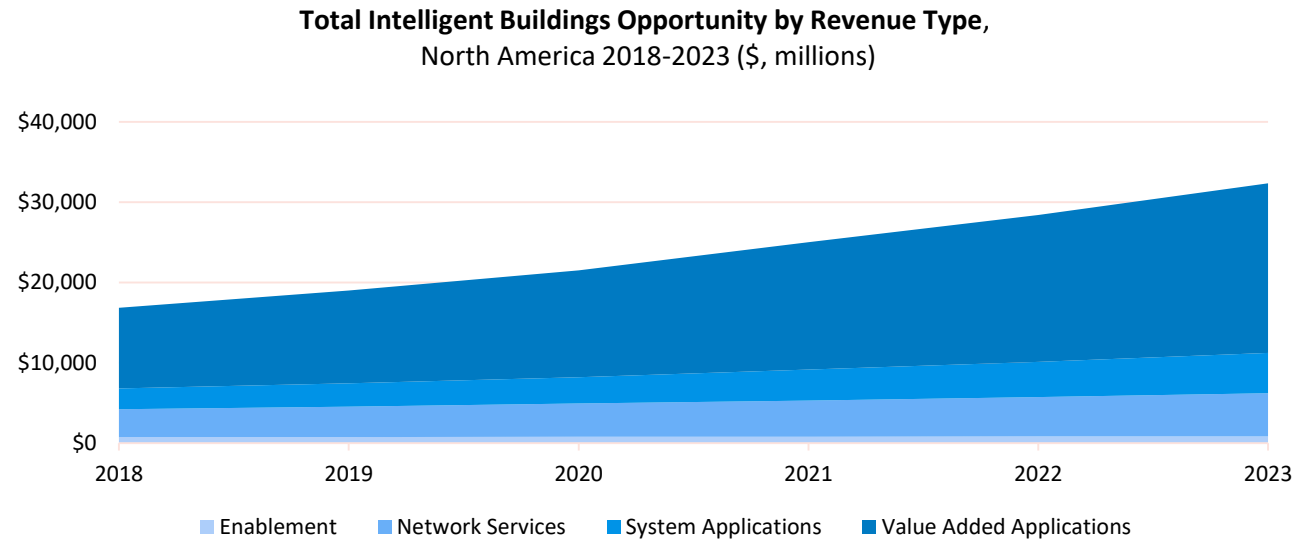


**Number of Shipped Devices by Buildings Sub-Segment,
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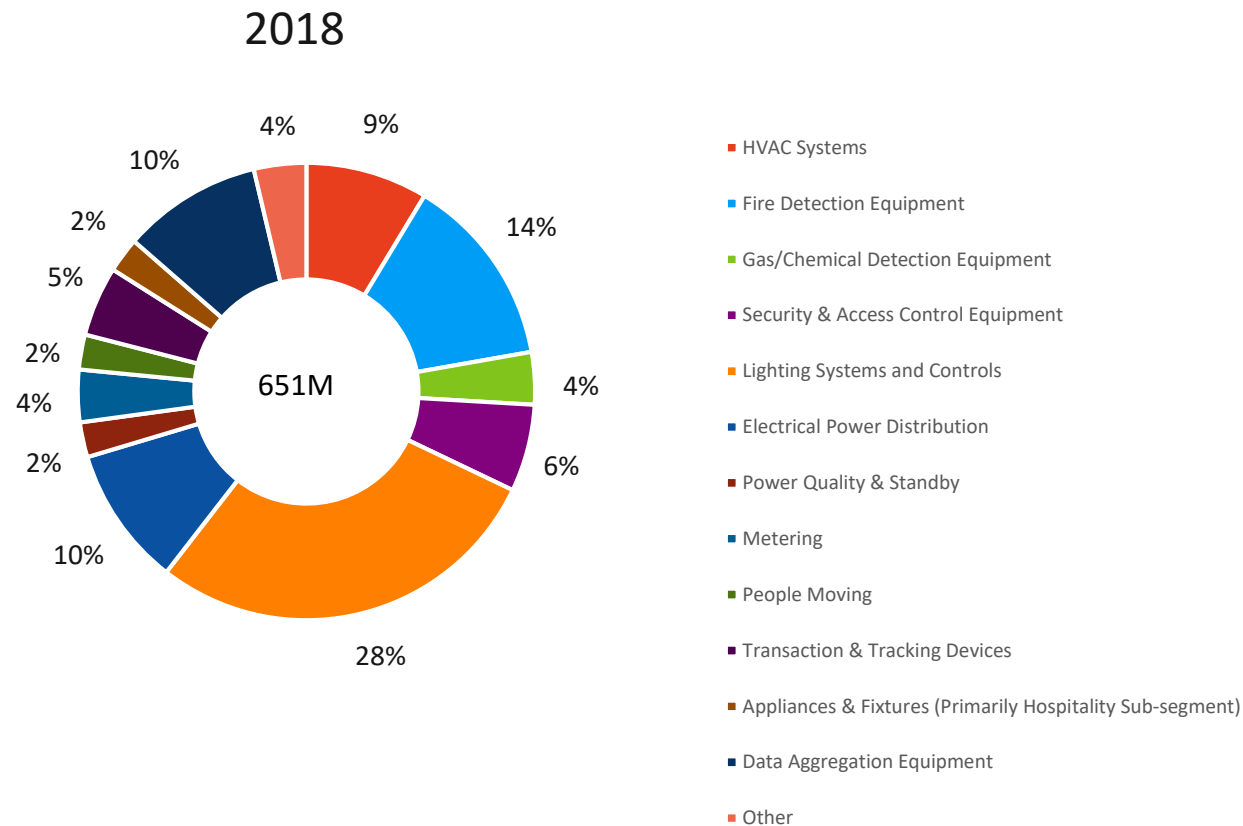
The Intelligent Building Opportunity Will Reach \$32B in 2023

(CABA Monetization of Intelligent Buildings 2018)

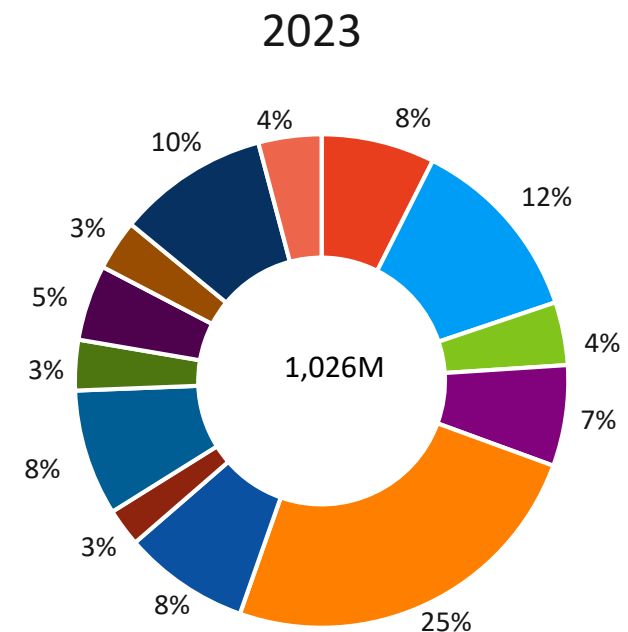


Lighting and Fire Detection Equipment – Show Greatest Opportunity

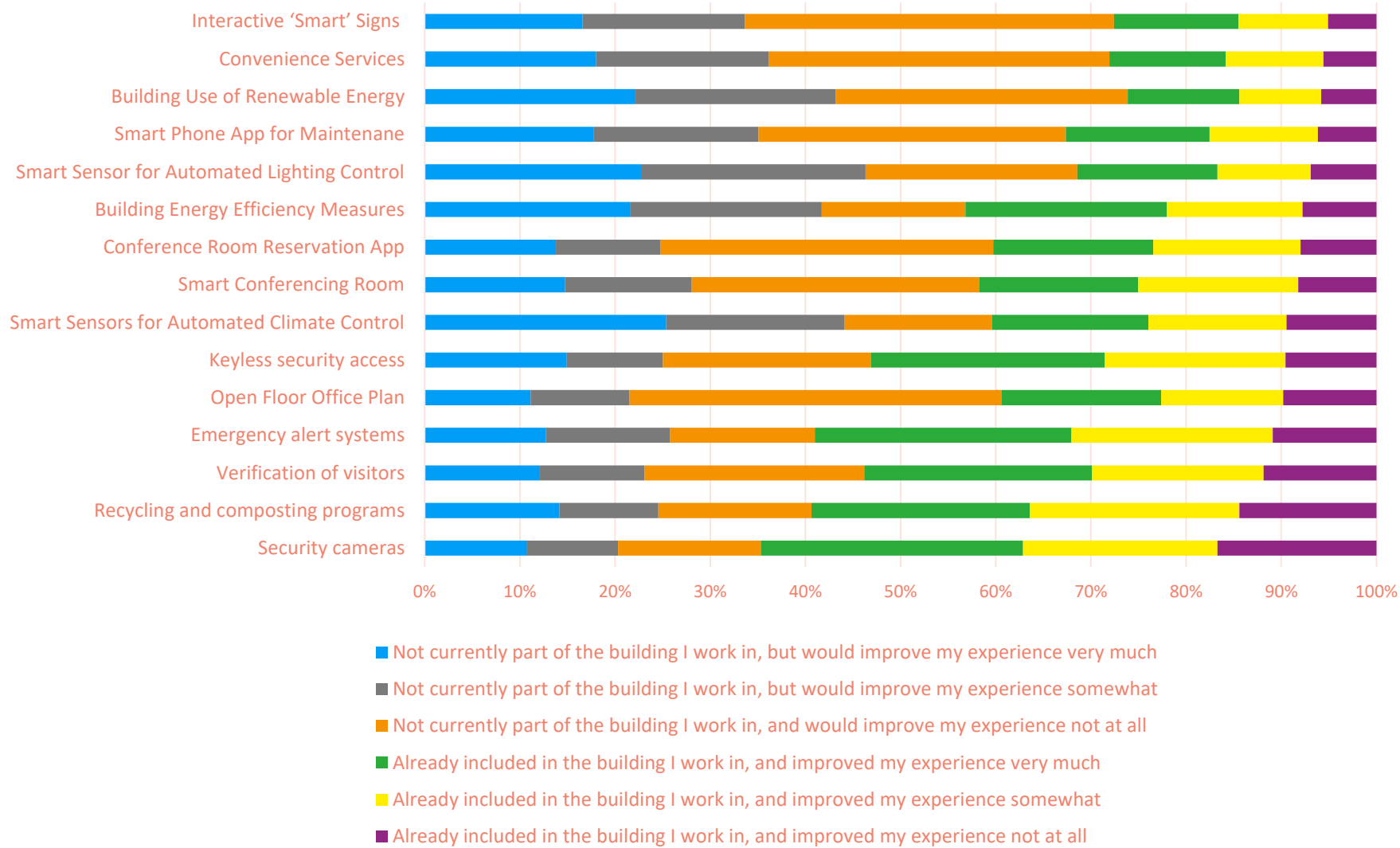
Number of Installed Devices by Buildings Sub-Segment,
North America 2018-2023 (units, millions)



'18-'23 CAGR: 9.5%



Tenants Report Climate and Lighting Control As Top Technology Preferences



Key Smart Systems Opportunities in Commercial Buildings

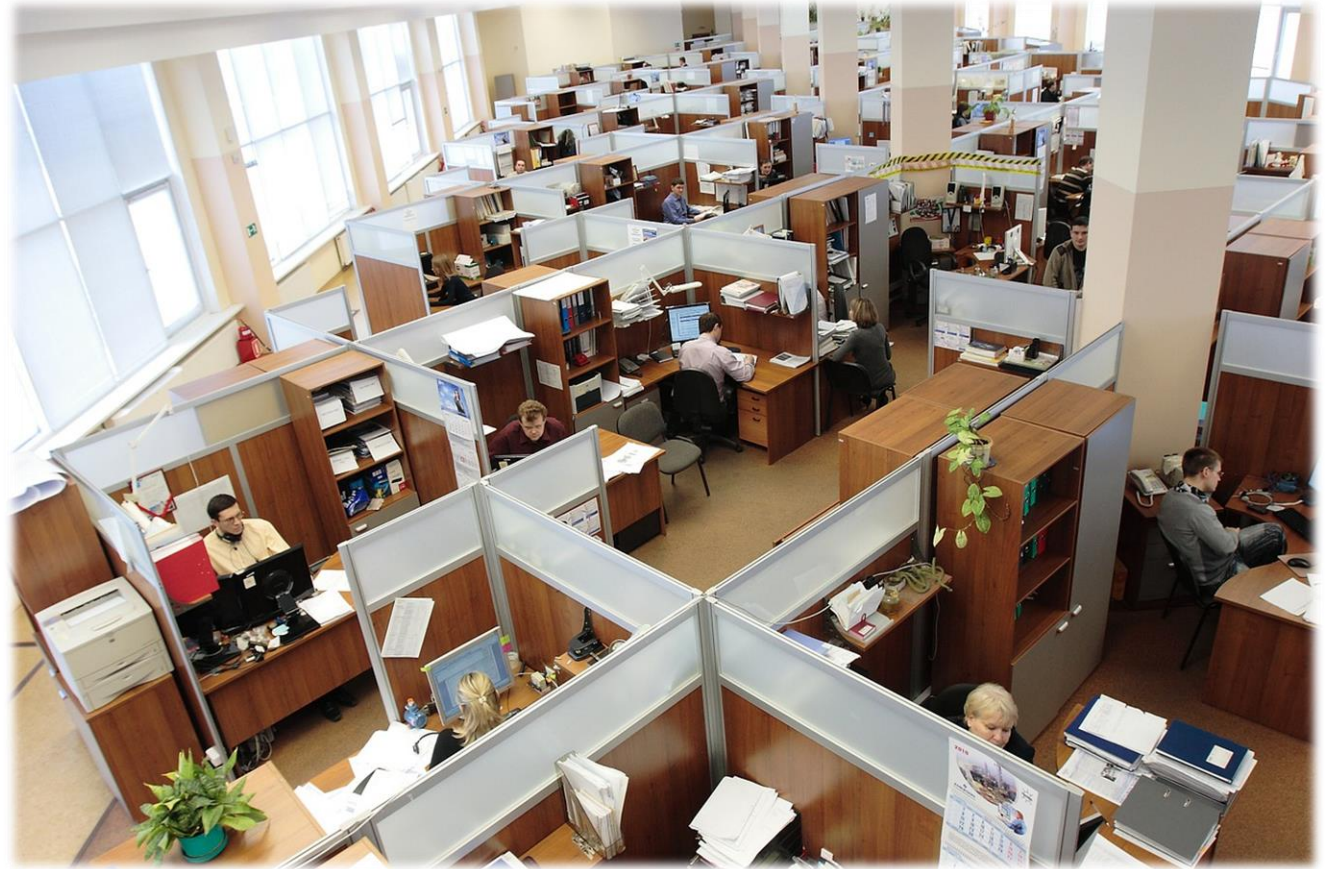


Improving Organizational Productivity with Building Automation Systems Report



Metrics:

- Absenteeism
- Employee turnover intent
- Self-assessed performance
- Job satisfaction
- Health and well-being
- Complaints to the Facility Manager
- Benchmark developed for each



Download the complete report at: www.caba.org/CABA/Research/CABA/Research/Phase2-NRC-Research-Project.aspx

The Forgotten 90% - THE EMPLOYEES!

 **90%**
**SALARIES
& BENEFITS**

90% of the costs associated with a building come from the people inside the building – **SALARIES AND BENEFITS.**²



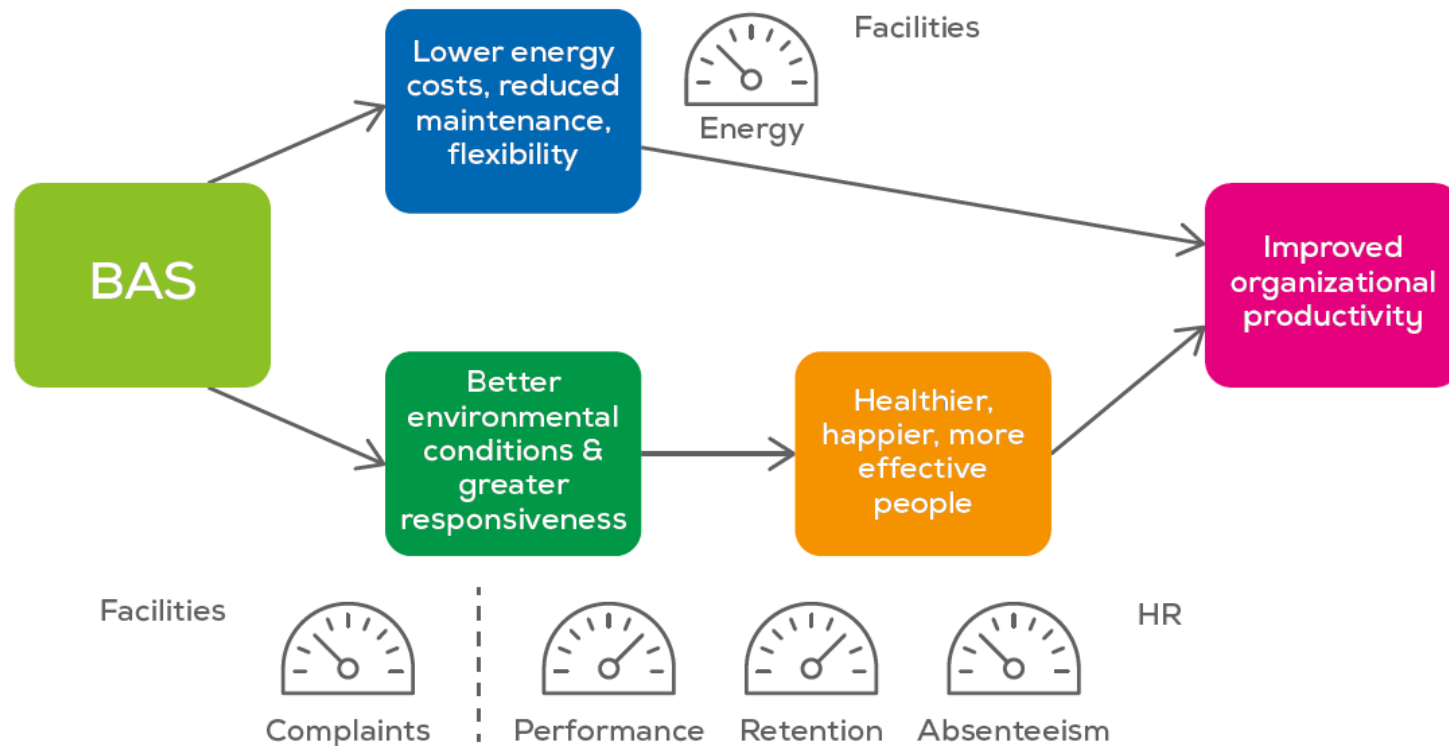
 **10%**
**OPERATING
COSTS**

Just **10%** of a building's operating costs are attributed to **ENERGY, MAINTENANCE, MORTGAGE/RENT,** among others.³

Allen JG, MacNaughton P, Satish U, Santanam S, Vallarino J, Spengler JD. 2015. Associations of Cognitive Function Scores with Carbon Dioxide, Ventilation, and Volatile Organic Compound Exposures in Office Workers: A Controlled Exposure Study of Green and Conventional Office Environments. Environ Health Perspect DOI: 10.1289/ehp.1510037

Phase 2: CABA Productivity and Efficiency Study 2019

- Phase 2 will examine the effect of building characteristics and systems on multiple metrics in the same organization
- Much of the necessary data already exists – it then must be accessed, collated and analyzed by building features
- Consortium of funding and data partners via CABA



Thank You and Contact CABA

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