**Smart Cities on the Rise**

Percentage of cities that have published or are already implementing a smart city strategy:
- Asia: 32%
- EMEA*: 57%
- North America: 66%
- Latin America: 25%

*Based on % of cities reporting they are in the implementation phase

**Global Top 10 Smart City Applications:**

1. LED street lighting
2. Broadband infrastructure
3. Smart public safety
4. Connected / smart street lighting
5. City open data platform
6. Distributed energy programs
7. Smart mobility/public transportation systems
8. Smart parking
9. Smart electricity meters
10. Air quality monitoring

*Based on % of cities reporting they are in the implementation phase

**Top Drivers of Smart City Investment by Region:**

- **Asia**
  - Sustainability - 58%
  - Economic development - 45%
  - Public safety - 43%

- **EMEA***
  - Tourism - 43%
  - Resilience - 43%
  - Public safety - 43%

- **Latin America**
  - Tourism - 43%
  - Economic development - 39%
  - Environmental issues - 37%

- **North America**
  - Public safety - 64%
  - Resilience - 56%
  - Communications infrastructure - 55%

*Based on % of respondents rating drivers as extremely important
*Based on % respondents rating drivers as extremely important
*Europe, Middle East, and Africa

**Are You Smart Ready?**

Systems Integration is Key to Smart, Safe, Sustainable Buildings and Cities

Global Energy Efficiency and Smart City Indicator* surveys from Johnson Controls, a global leader in intelligent buildings, reveal significant global investment in building systems integration and strong focus on safety and security.

**Smart Buildings Gain Momentum**

Global Investment in Smart Ready Technology

Organizations investing in the next year:
- 55% Building controls (vs. 48% in 2017)
- 46% Fire/life safety improvements
- 41% Centralized building operations center
- 35% Security improvements

**Integration with Other Building Systems**

In the next year:
- 49% of organizations plan to integrate life safety
- 45% of organizations plan to integrate security
- 39% of organizations plan to integrate building management
- 30% of organizations plan to integrate smart building equipment

*Based on % of cities reporting they are in the implementation phase
Johnson Controls conducted its second annual smart city indicator survey to track key drivers, organizational barriers, technology trends, and the status of smart city solution implementations around the world. The survey queried over 330 city leaders in 20 countries, including almost 120 from Canada and the United States. Survey findings show that cities are increasingly looking to implement applications that will improve sustainability and the environment while creating jobs, improving public safety and reducing costs.

### MOST CITIES ARE EARLY IN THE PROCESS OF IMPLEMENTING THEIR SMART CITY STRATEGY

**North America**
- **30%** of respondents indicated their strategy is either under discussion or in the preparation phase.
- **37%** have published their smart city strategy and **29%** are implementing their strategic program.

**Global**
- Globally, **29%** of cities have published their smart city strategy and **22%** are in the implementation phase.
**2018 Smart City Indicator Survey North America**

**Top Barriers to Investment**
- 18% lack of city leadership
- 18% lack of state / federal government support
- 14% security concerns

The biggest barrier globally is lack of proven business cases.

**Unavailability of Appropriate Financing Options**
- 36% of respondents identify unavailability of appropriate financing options as the top financial barrier.

**Methods for Financing Smart City Projects**
- 55% City funded
- 55% State / federal government funded
- 43% Public-private partnerships
- 17% Utility funded
- 6% Private sector funded
- 3% User funded

**Technology Trends Expected to Have Impact Over the Next Five Years**
1. Systems integration
2. Data analytics
3. Artificial intelligence / machine learning
4. Cybersecurity
5. The Internet of Things (IoT)

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**Smart City Application Implementation**

- LED street lighting: 95%
- Smart public safety (video surveillance/analysis): 86%
- Broadband infrastructure (public Wi-Fi, fiber network): 85%
- Distributed energy programs: 81%
- Smart mobility/public transportation systems: 80%
- Connected / smart street lighting: 78%
- Smart parking: 75%
- City open data platform: 75%
- City operations center (emergency response coordination): 74%
- Water and wastewater system monitoring: 74%

**2018 Survey Demographics**

To qualify, respondents must review or approve smart city initiatives in their municipality. The survey was administered anonymously by a third party research partner. For the 2018 survey, there was a representative mix of global respondents from medium to large cities.

- Cities less than 250k: 17%
- Cities ranging in population from 250k to 500k: 34%
- Cities ranging in population from 500k to one million: 28%
- Cities greater than one million: 21%

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