The Internet of Things (IoT)
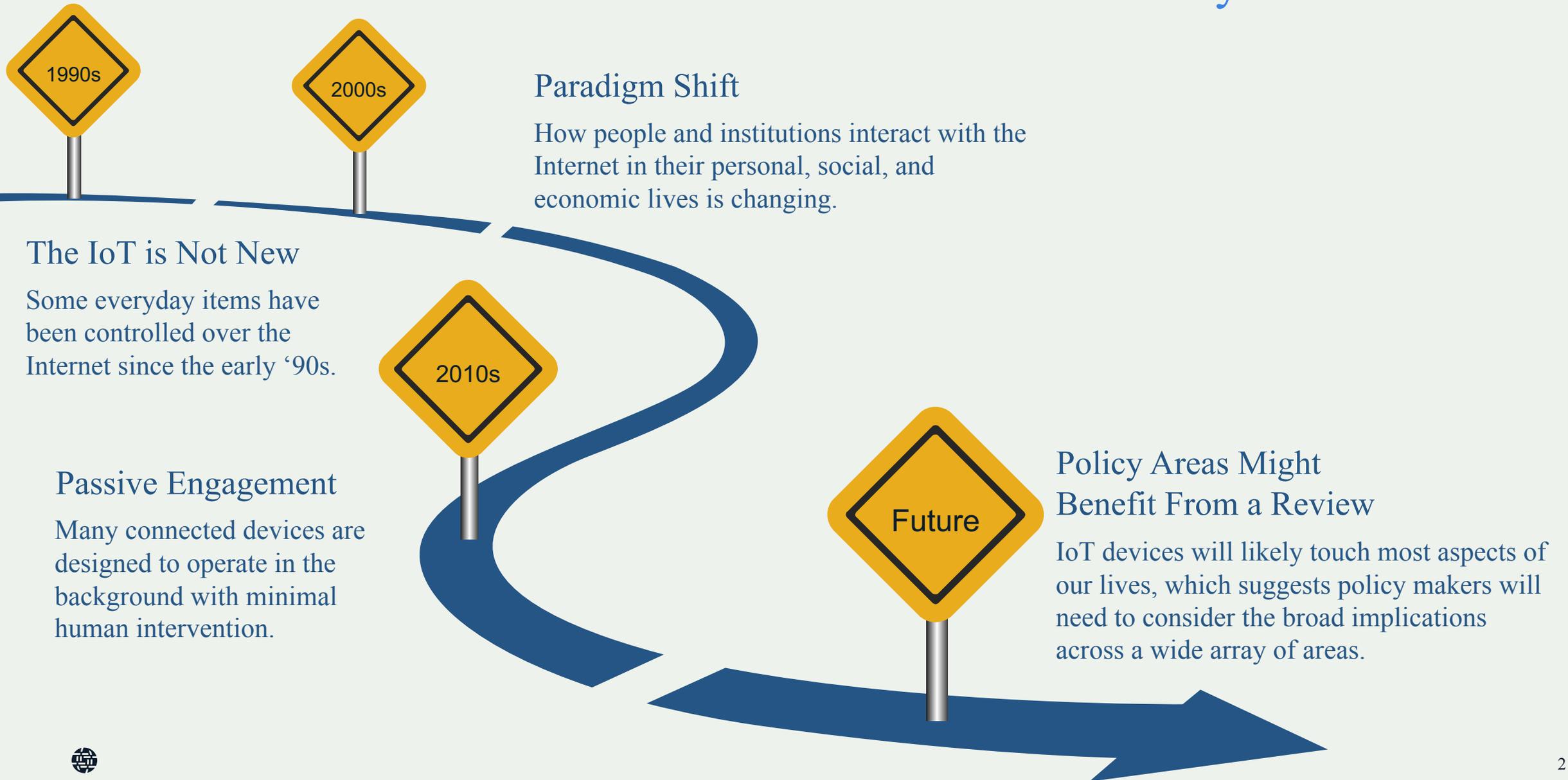
Everyday items connected
to the Internet will transform
the ways we work, live, and play.

Internet
Society

1990s

2000s

Paradigm Shift

How people and institutions interact with the Internet in their personal, social, and economic lives is changing.

The IoT is Not New

Some everyday items have been controlled over the Internet since the early '90s.

2010s

Passive Engagement

Many connected devices are designed to operate in the background with minimal human intervention.

Future

Policy Areas Might Benefit From a Review

IoT devices will likely touch most aspects of our lives, which suggests policy makers will need to consider the broad implications across a wide array of areas.

Challenges

Security
How to ensure robust and lifelong security in IoT products and services?

Privacy
Strategies need to be developed that promote transparency, fairness, and user choice in data collection and handling.

Interoperability and Standards
The voluntary use of open, interoperable, and widely available standards as technical building blocks for IoT devices will deliver greater benefits.

Regulatory, Legal, and Rights Issues
The rapid rate of change in IoT technology could outpace the ability of associated policy, legal, and regulatory structures to adapt.

Emerging Economy and Development Issues
In order for the benefits of the IoT to be truly global, the unique needs and challenges of implementation in less-developed regions will need to be addressed.

Guiding Principles

Promote Internet and data-infrastructure growth

— Governments should promote the expansion of both wireless and wireline infrastructure, and remove barriers to datacenter development.

Encourage IPv6 deployment

— Governments should make IPv6 adoption a national priority, as the IoT will drive up the number of connected devices.

Encourage open, voluntary IoT standards

— Encourage interested stakeholders to work together on the development of open, consensus-based standards that support interoperability.

Adopt a collaborative, multistakeholder approach to IoT policy discussions

— Draw on the expertise of a wide range of stakeholders to develop appropriate solutions.

Encourage a collaborative approach to IoT security

— Empower players to address security issues close to where they occur – don't centralize IoT security.

Encourage responsible design practices for IoT services

— Security-by-design and privacy-by-design practices for IoT devices should be encouraged.

Thank you.

Read the policy brief:

www.internetsociety.org/policybriefs/iot