



5G Wireless Technology

April 22, 2019 City Council Work Session



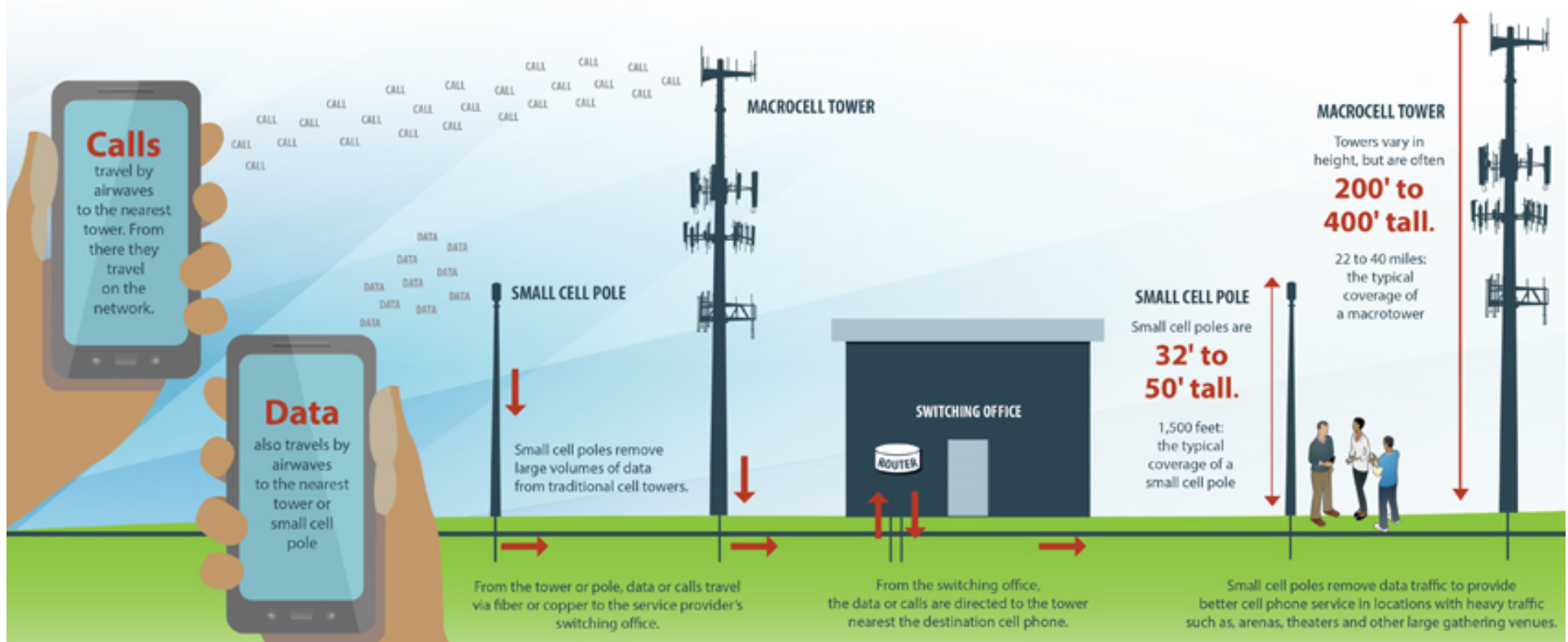
“5G”: You’ve heard the term but what does it mean?

- “5G” is the fifth generation of wireless technology and will introduce one of the fastest wireless communication systems ever created. It will allow for the widespread adoption of a number of new industries including, but not limited to:
 - Autonomous vehicles,
 - Smart communities,
 - New industrial advancements;
 - Internet of things (IoT), and
 - Higher data transfer rates and reduced bandwidth limitations.

“5G”: How does it work?

- “5G” will be built upon an extensive network of smaller antennas arrays called “small cell sites” and will have a fiber network as its backbone. The fiber network will quickly and efficiently transfer information between a dense network of small cell sites. It’s anticipated that every cellular provider will have it’s own 5G network but all will need the City’s partnership to facilitate the installation of a fiber network and small cell sites in high traffic/demand areas.

“5G”: A visual depiction of how it works.



“5G”: Examples of Small Cell Sites



“5G”: Why does the City need 5G?

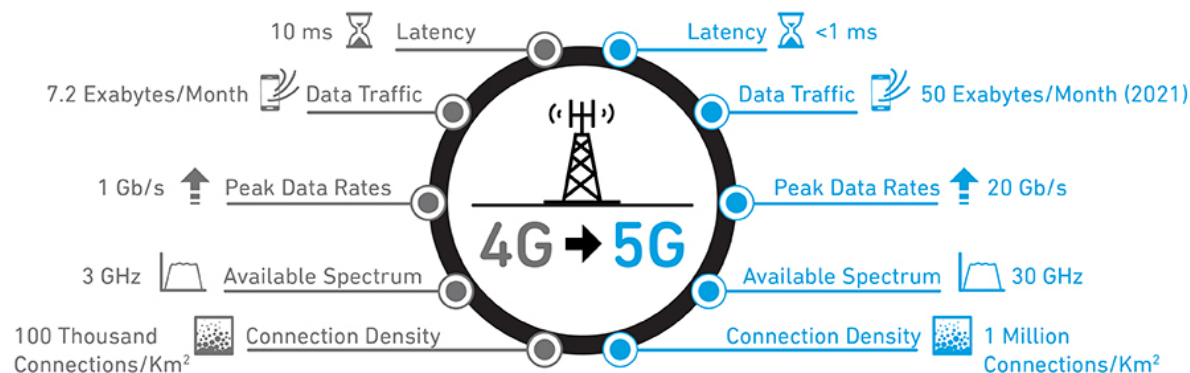
- “5G” technology has the potential to disrupt and create a number of new industries and trends. As McKinney strives to build a sustainable community that is positioned for long-term success, early investments in 5G networks and 5G partnerships could pay huge dividends for the community over time.



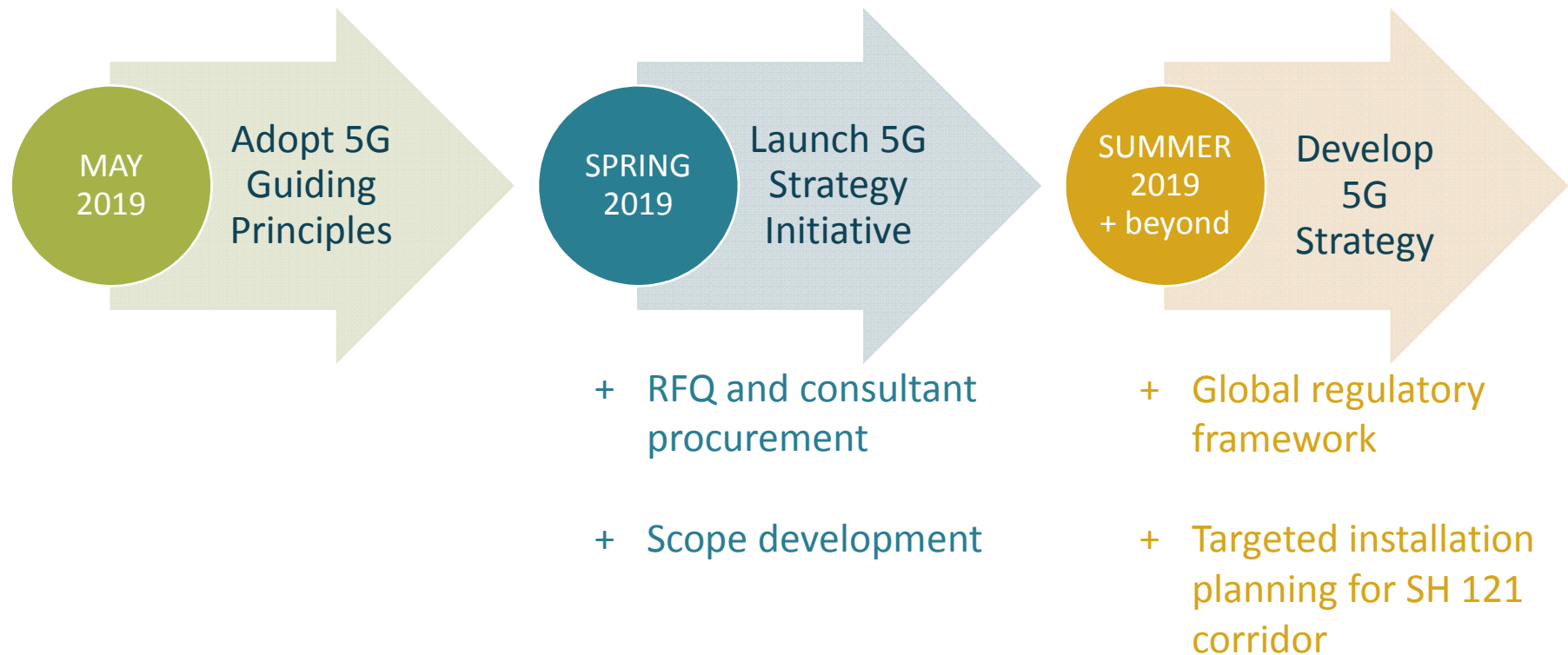
IoT DEVICE
Category Guide



LEGEND
PAN = Personal Area Network
LAN = Local Area Network
WAN = Wide Area Network
= Custom IoT DEVICE



"5G" Next Steps.





Questions/Discussion

