



# Telephone System Upgrade - Project Update

Presentation to General Committee

June 14, 2021

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## Purpose

To update Council on the continued enhancement of our digital workplace through the implementation of our new telephony system



## Agenda

- Digital Markham Focus: Digital Workplace
- Our Telephony Journey
- Shift to Computer-based Communication
- Softphone & Mobile App
- Implementation Strategy and Rollout Plan
- Future Roadmap



## Digital Workplace

- Enabling a digital workplace(& workforce) is a key pillar in the Digital Markham Strategy, and has been a priority for the City for many years
- Today, the City provides a full suite of tools in support of a digital & mobile workforce including laptops, handheld devices, VPN access, Citrix as well as a host of online services .
- For voice communications & collaboration, Staff are equipped with desk phones, mobile phones, conferencing and meeting tools (e.g., Skype, Zoom and Microsoft Teams (as part of the pilot).
- During the pandemic, investments in these tools have paid off contributing to our ability to pivot with immediate effect and transition to working remotely.
- The City will continue to assess opportunities to modernize business operations, improve customer service and enhance productivity



## Our Telephony Journey

- In 2012, the City changed to a Voice over IP (VoIP) telephone system, which uses data lines for voice traffic.
- This E-3 initiative eliminated dedicated land lines, and achieved a significant operational cost saving.
- The hardware infrastructure deployed in 2012 is now at end of life and was approved for replacement as part of the 2019 capital budget.
- An RFP for the replacement telephony system was issued in 2020 and the contract has been awarded to Unity. The project launched in November 2020.
- Our future vision is a workplace and workforce fully enabled with unified communications and collaboration tools to work securely anywhere, any time.
- Replacement of the current telephony infrastructure allows us to take the next step in digital transformation of our communications and collaboration channels



# Staff Voice Communication Today

Dedicated Phone Extension



Corporately provided or  
BYOD device



- Skype
- Zoom
- MS Teams (pilot participants only)

The current approach includes duplicate communications tools with limited integration capability across platforms



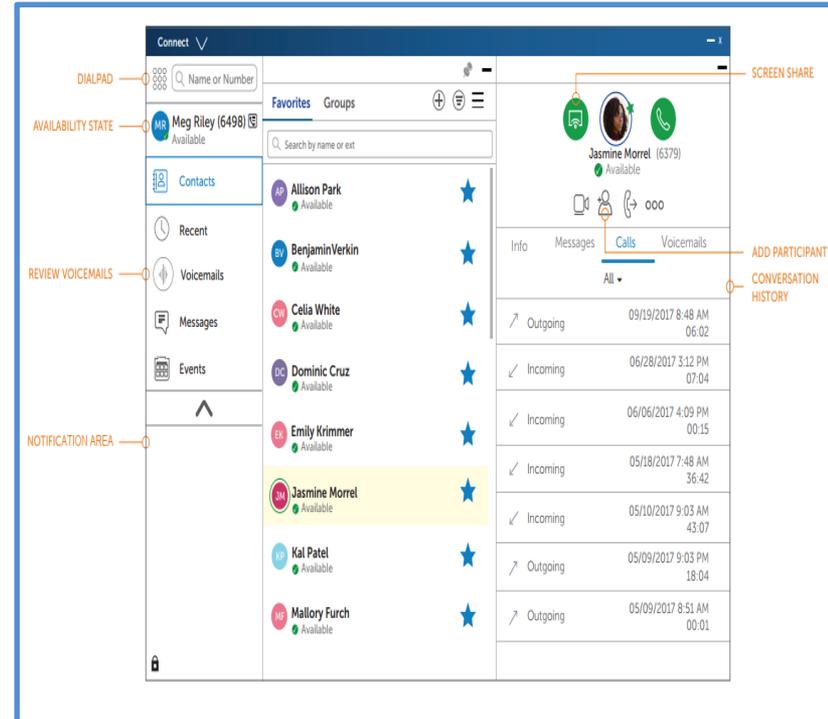
## Features of the New Telephony System

- The new system includes many new features and enhancements over the previous desk phone-centred technology, as well as an upgraded system for the Contact Centre and the ability to integrate with the new CRM.
- It also provides an opportunity to “rethink” how telephone services can be provided within the City
- Among the most important enhancements are computer-based communications tools to support remote work and seamless customer service:
  - “soft phones”
  - a mobile App



# New Features: Soft Phone

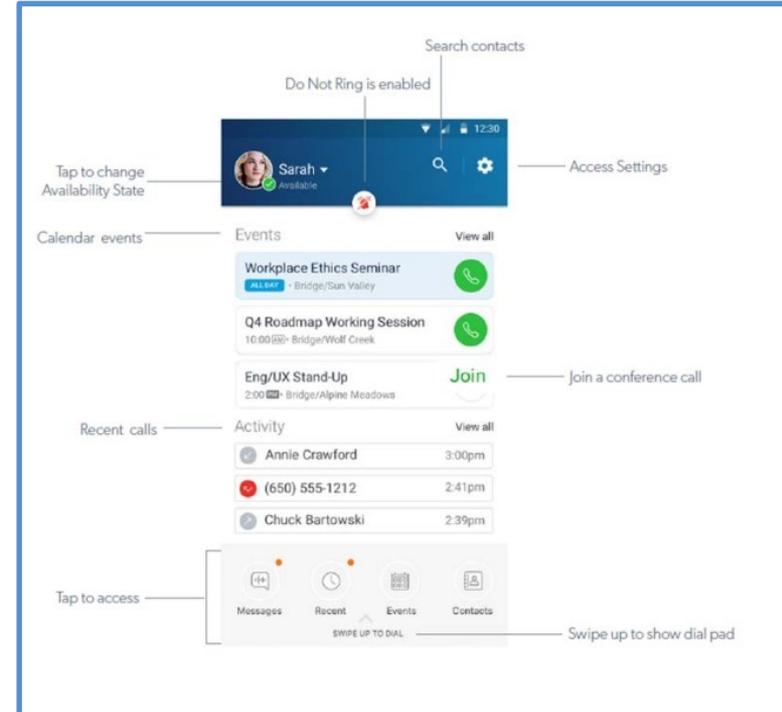
- A 'soft phone' is software that is installed on a City owned computer, such as a desktop, laptop, tablet, or tough book computer
- Soft phones bring all the functionality of a desk phone onto a user's computing device
- This software will meet the needs of a flexible and mobile workforce by enabling all staff working off-premise to connect through the corporate VPN to the City's phone system, allowing them to access their business line remotely (to make and receive calls, contacts, voicemails, messages, etc.)
- Soft phones offer additional features such as: video calling (internal one-on-one), conferencing, visual voicemail management, chat capabilities, integration of contact directories.





# New Features - Mobile App on Smart Phone

- A Smart Phone mobile app – gives all corporate and BYOD smart phone users the ability to manage all business communications easily and effectively from any location
- Seamlessly switch calls between computer based softphone and mobile softphone application without dropping the calls
- No need to give out cell numbers as contacts can reach staff directly through the regular business number





# Our Future: Integrated Computer-based Communications

- Skype
- Zoom
- MS Teams (pilot participants only)
- Softphone enablement (dedicated phone extension)



- Corporately provided or BYOD device
- Mobile app enabled for dedicated phone extension



Office and Field/Operations staff will be provided with additional flexible and mobile options for voice communication



## The Future of the Desk Phone

- Given the functionality features of the new telephony system, there is no longer a need for all staff to rely on a desk phone.
- In fact during COVID, with mobile work, desk phones are no longer a key communications tool
- Industry best practices show that many businesses have opted to eliminate desk phones in favour of soft phones and smart phones
- As an example, over the past five+ years, KPMG eliminated desk phones and landlines for more than 5000 staff through use of Skype for Business, and have recently moved to Microsoft Teams.
- ITS Staff recently met with Kevin Travers, our external auditor, and IT Staff at KPMG, to learn about their experience and lessons learned.



## Implementation Strategy

- The new telephony infrastructure has now been implemented, and ITS is now ready to deploy the necessary communication tools for Council and Staff.
- The focus continues to be ensuring that Staff have the necessary communication and collaboration tools to work effectively
- ELT has challenged ITS Staff to optimize the use of the new computer-based communication tools for our workforce, to significantly reduce the number of desk phones where possible
- This means that most Staff will use the softphone on their City-provided laptop, eliminating the need for a desk phone, and enabling them to work remotely or in the office.
- Headsets will be provided by ITS with each soft phone deployment
- Staff with City-provided cell phones or BYOD phones will have access to the mobile app in addition to the soft phone on their computer



## Implementation Strategy

- A number of desk phones will still be required to support emergency calling, autodial 911, shared workstation calling (ie., security desks, larger boardrooms, recreation/fitness centre counters, Emergency Operations Centre needs).
- The plan currently calls for an 81% reduction of desk phones, from 1190 to 226
- The optimization of computer based telephony tools supports:
  - continuation of remote and/or hybrid work for the foreseeable future
  - additional features better enabling remote/mobile workers
- As computer refreshes are done, ITS will be replacing current desk top computers with laptops and tablets to fully enable access to the new technology tools, mobility and hybrid work
- Smart phones will continue to be available for Staff, based on business requirements



## Roll-out Plan

- The roll-out of the new phone systems will be done on a department by department basis, in consultation with Directors and Council members.
- ITS will be deployed first to ensure any identified issues are captured and rectified before continued rollout.
- Facility rollout will be based upon complexity and size – minimizing impact/disruption
- Soft phone apps will be rolled out to Staff, coordinated with a training plan and timelines
- Soft phones will be deployed first, followed shortly after by remaining desk phones, as per approved criteria and ELT direction
- Old desk phones will be removed in coordination with deployment timeline
- General communications will precede any deployment
- Detailed communications will be provided to each department/team prior to deployment, including conversion and training details.
- **Timing** – planned for full deployment by end Q3 2021.



## Future Roadmap

- This is a continued step on the path towards Unified Communications and Collaboration and supports the Digital Markham Strategy
- Unified Communications and Collaboration includes:
  - Unified messaging
  - Instant messaging
  - Conferencing capabilities
  - Mobility
  - Collaborative tools
  - Business Process Integration
- ITS will continue to explore opportunities to further consolidate and streamline platforms and tools used to facilitate communication and work collaboration including:
  - Computer-based voice enablement of all devices, including shared devices
  - Future elimination of VoIP and related desk phone infrastructure



## Recommendations

That the presentation entitled Telephone System Upgrade – Project Update be received; and

That Staff be authorized to do all things necessary to give effect to this resolution.