

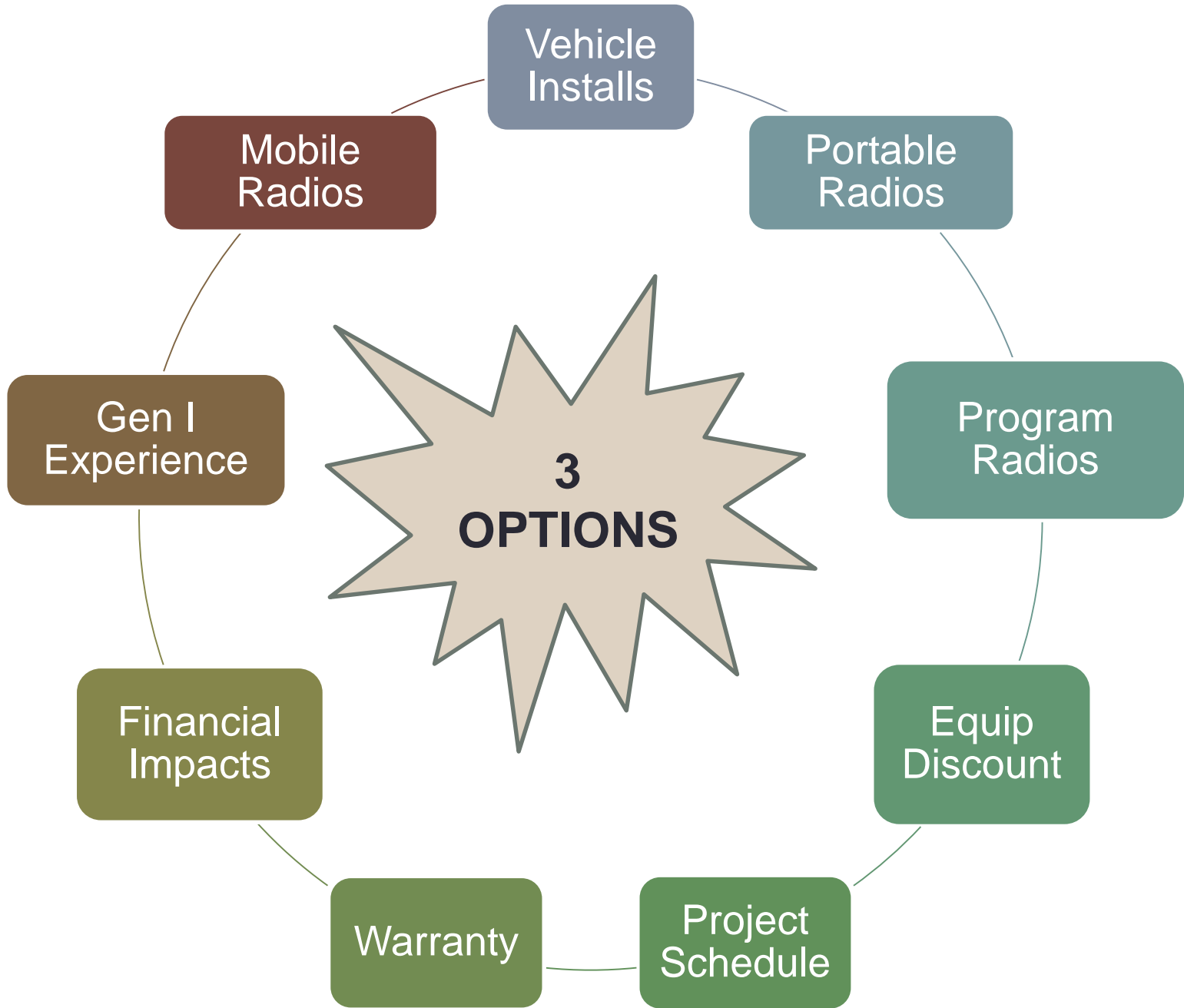
MERA: *WHEN SECONDS SAVE LIVES*

Next Gen Project Oversight Committee

Monday, 03/19/2018



Puzzle Pieces



- Single Band Mobile Radios – Next Gen System Only.
 - Only supports Option #1
 - Programmed and installed as Next Gen radios
- Dual Band Mobile Radios – Gen I and Next Gen System
 - Required for Options #2 and #3
 - Programmed and installed as Gen I radios, requires reprogramming at cutover for Next Gen System operation
 - No cost to upgrade to dual band now
 - Cost to upgrade later
 - Third band available as local agency upgrade option

- Single Band Portable Radios – Next Gen System Only.
 - No impact on options
 - Programmed and distributed as Next Gen radios just prior to cutover
- Dual band Portable Radios – Gen I and Next Gen System
 - No impact on options
 - If distributed before cutover will require reprogramming
 - No cost to upgrade to dual band now
 - Cost to upgrade later
 - Third band available as local upgrade option
 - Fire agency interest in Next Gen System and VHF only now
 - Requires use of existing Gen I portable until cutover

- Vehicle Installation
 - 8 to 10 month process
- Option #1 – Start at cutover
 - This is in the current draft schedule
 - April 2021 completion date
 - Program once
- Option #2 and #3
 - Saves approx. 8 months from Option #1
 - Option #2 aimed to complete installation just before cutover
 - Option #3 aimed to begin installation late summer 2018
 - Both options require reprogramming at cutover

- Manual Programming
 - All radios will initially be programmed by technicians
 - Follow up programming at \$75k to \$130k per round
 - Slow as technicians need to find and touch each radio
 - During cutover, users on Gen I and Next Gen System simultaneously for several weeks
- Over The Air Programming (OTAP)
 - Uses MERA radio channel to sequentially program selected radios
 - Includes Radio Management Software (RMS)
 - During cutover, users on Gen I and Next Gen System simultaneously for several weeks
- Wi-Fi
 - Uses a series of MERA/Member provided hotspots to reprogram radio fleet in hours
 - Includes Radio Management Software (RMS)
 - Still assessing this technology
- Recommending Hybrid OTAP/Wi-Fi/RMS solution

- Subscriber Equipment Discount
 - \$500,000 discount for early delivery
 - Originally scheduled to expire 12/2017
 - New expiration date not yet set
 - With Option #3, discount is certain

- Project Schedule
 - Current draft schedule shows final acceptance in April 2021
 - This assumes Option #1
 - Option #2 and #3 accelerate the project 8 months to August 2020.
- CEQA
 - Potential delays with CEQA, but would push back the completion dates for all options
- Legacy Support
 - Option #2 and #3 reduce time needed to support Gen I system

Project Schedule

Project Schedule Milestones

Now

Cutover

Final Acceptance

Next Gen Project

Option #3

Option #1

Option #2

Option Schedule Impacts

Warranties

- All radios issued early will be under standard Motorola warranty
- At final system acceptance, all radio warranties will be restarted

- **System Discount**
 - Option #1 – Likely \$0
 - Option #2 – Not determined
 - Option #3 - \$500,000
- **Dual Band Offer**
 - Option #1 – Not Required
 - Option #2 - \$500,000 cost to MERA
 - Option #3 – Free upgrade
- **Schedule Impacts**
 - MERA soft costs approx. \$100,000/month
- **Cash Flow**
 - Option #1 – Equipment Invoice Early 2020
 - Option #2 – Equipment Invoice Fall/Winter 2019
 - Option #3 – Equipment Invoice Summer, 2018

- Radio Programming
 - Technician, Manual - \$75k to 130K per round of programming
 - OTAP/Wi-Fi Hybrid - \$523,556 One time cost
 - Wi-Fi Only - \$503,889

- Gen I
 - Radios delivered with significant delay in installation and use
- Option #1
 - All but early order radios delivered based on start of cutover date
- Option #2
 - With exception of early order radios.....
 - Mobile radios delivered to have all installed by cutover date
 - Portable radios delivered in time to distribute for cutover
- Option #3
 - All Mobiles installed as Gen I radios and in use immediately
 - Early order portables in use immediately as Gen I radios
 - All other portables delivered in time for cutover

- Option #1
 - No decision needed
 - Except for early order radios, all radios delivered in time for cutover
 - Mobile radios installed after cutover
 - Likely lose \$500k system discount
 - No project time savings

- Option #2
 - Decision required
 - Except for early order radios.....
 - Mobile radios delivered in 2019 for installation right up to cutover
 - Recommend OTAP/Wi-Fi/RMS solution at \$523,556
 - Requires Dual Band at \$500,000 cost to MERA
 - Likely lose \$500,000 system discount
 - Portable radios delivered in time for cutover
 - Project Time savings of 8 months (\$800,000)
 - Compared to Option #1 – Cost to MERA - \$223,556

- Option #3
 - Decision required
 - Except for early order radios.....
 - All Mobile radios delivered in summer 2018 for immediate installation and use
 - Recommend OTAP/Wi-Fi/RMS solution at \$523,556
 - Requires Dual Band at no cost to MERA
 - \$500,000 system discount
 - Portable radios delivered in time for cutover
 - Project Time savings of 8 months (\$800,000)
- Compared to Option #1 –
 - Savings to MERA - \$776,444 (Syst Disc + Project Time – WiFi)
- Compared to Option #2 –
 - Savings to MERA - \$1,000,000 (Syst Disc + Dual Band)



MERA: SECONDS SAVE LIVES

See

www.MERAonline.org

for more information