

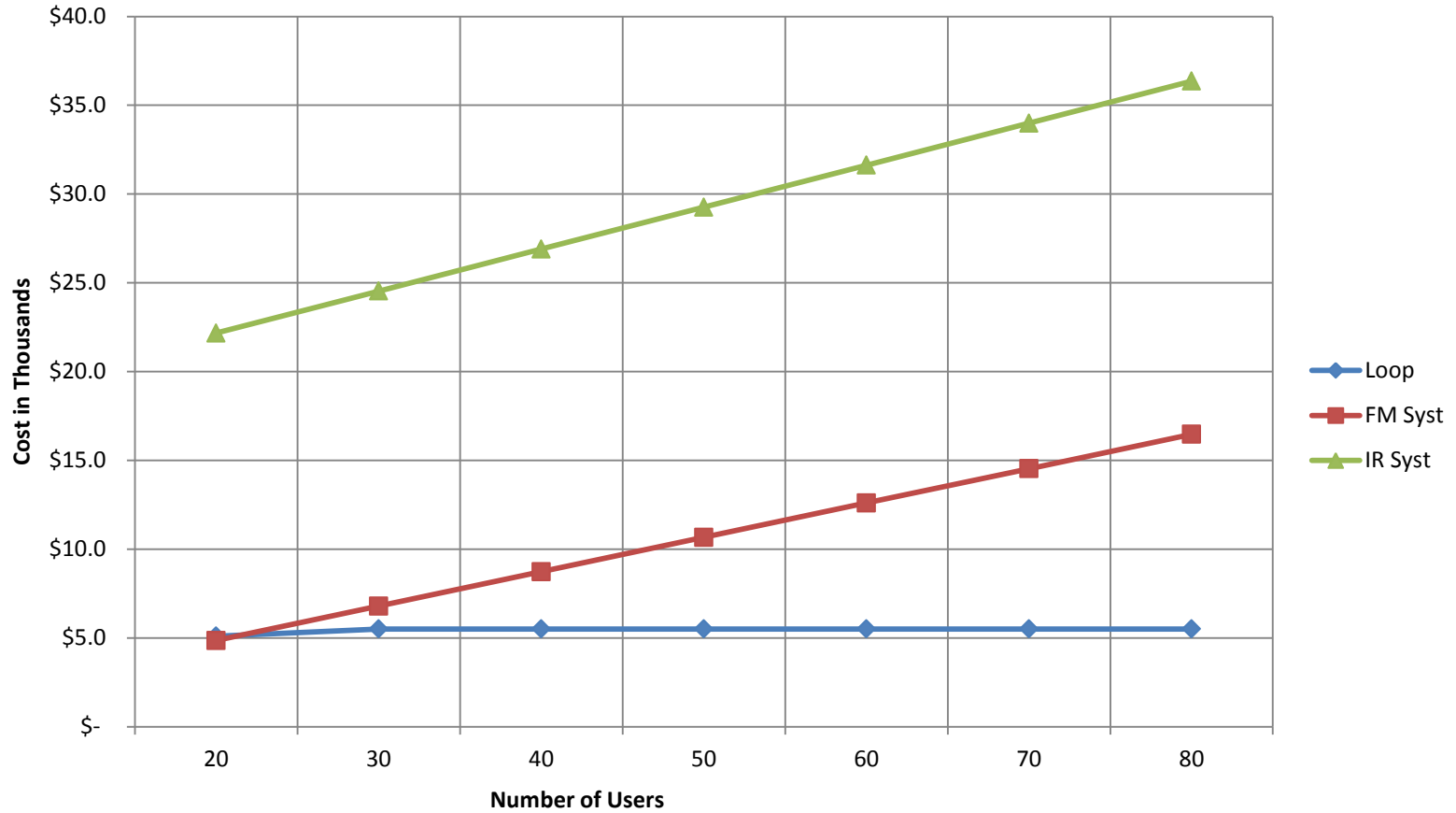


# Assistive Listening Devices

For a large venue

Category	Hearing Loop	FM System	Infrared (IR)	Bluetooth
Description	Sound transmitted by magnetic induction and picked up directly by <i>any</i> brand of hearing aid or cochlear t-coil	Works just like commercial FM broadcast systems, need a transmitter and receiver	Audio signal is conveyed onto the base station, converted into infrared light by emitter, receiver detects signal and converts it back to audio	Requires a relay device to transmit audio from the source to the hearing aid. <i>Not appropriate for a large venue.</i>
Cost/User <small>(based on 50 users)</small>	\$102	\$213	\$585	N/A
Installation	Need Installer	Somewhat technical	Somewhat technical	Somewhat technical
Portability	Not	Highly	Highly	Highly
Privacy	Overspill in all directions (can be limited by design.)	Transmission can be tuned in.	Private	Private
System interference	Steel construction and old wiring can cause interference (EMI)	Can select band with no interference	No interference, line-of-sight only, sensitive to sunlight	No interference, distance limited to 10 meters
Equipment required	Amplifier, wire, sound source adapter cable, t-coil with manual activation	Transmitter, receiver and neck loop for t-coil with manual activation or headset	Transmitter, emitter, and receiver with neck loop for t-coil with manual activation or headset	Relay device for brand specific hearing aid (must be paired)
(+) Advantages, (-) Disadvantages	(+) No headset and any t-coil can connect (+) No receiver required by user with t-coils (+) Very little maintenance required (make sure its turned on)	(-) Users must wear receivers	(-) Users must wear receivers	(+) Can connect to 8 BT devices (cellphone, computer, car, etc.) simultaneously (-) Energy intensive

### Comparison of Assistive Listening Device Costs



Loop	\$5.1	\$5.1	\$5.1	\$5.1	\$5.1	\$5.1	\$5.1
FM Syst	\$4.9	\$6.8	\$8.7	\$10.7	\$12.6	\$14.5	\$16.5
IR Syst	\$22.2	\$24.5	\$26.9	\$29.3	\$31.6	\$34.0	\$36.4

- FM & IR costs based on Listen Technologies 2013 catalog
- Includes an estimate of maintenance cost for 1 year.