

# SOUND AND VIDEO CONVERSIONS

FORT COLLINS MACINTOSH USER GROUP

# VIDEO

---

- Compression
  - Making smaller (h.264, 3gp)
- File Conversion (extension)
  - Changing Format (.mov, .avi)

# APPLICATIONS

---

- Quicktime (\$29.99)
- ffmpegX (\$15.00 - Donation)
- MPEG Stream Clip (Free)
- iTunes (Free)

# TECHNICAL

---

- Bit Rate
  - 1 Mbit/s — VHS quality
  - 5 Mbit/s — DVD quality
  - 15 Mbit/s — HDTV quality
- Frame Size (ABC x XYZ) (Lines of resolution)
  - 640x480
  - 768x576 (Standard Definition)
  - 1920x1080 (1080i High Definition)
  - The higher the numbers, the more detail

# TECHNICAL CONTINUED

---

- Frame Rate
  - 1-30 (29.98 is standard TV)
  - 24 is for Cinema (Hollywood movies)
  - 10-20 can be used for web

# TECHNICAL

---

- Bit Rate

- 32 kbit/s — MW (AM) quality
- 96 kbit/s — FM quality
- 128 - 160 kbit/s - Decent quality, difference can sometimes be obvious (128 is iTunes rate)
- 192 kbit/s — Good quality; difference can be heard by only a few
- 224 - 320 kbit/s — High, near transparent, quality

# COMPRESSION REASONS

---

- Reduce file size
- Compatibility (AAC to MP3)
- Hardware playback (DVD)

# CONVERTING

---

- Decide on original file type and “convert to” file type
- Multipass
- Frame Rate
- Frame Size

# EXAMPLES

---

- vob (DVD format) to mpeg-4 (web format)
- vob to ipod (mpeg-4 with smaller frame size)
- AAC to MP3
- AIFF (CD) to MP3
- MP3 to AIFF (for FCP use)