# **Laptop Options Explained**

To begin the laptop search, I'm going to give you a brief summary of the considerations, which you can use as a checklist. Let me know which you care about and which you don't, and that will help point us to specific models. All new models now come with built-in wireless, wide-screen displays, firewire ports (for transferring video from a digital camcorder), and at least 2 USB ports.

<u>Price Range</u>: Just give me some idea of the how much you can afford or are expecting to spend. Don't be fooled by fliers advertising super-low prices for laptops. There is a lot of flimsy junk being sold out there these days.

<u>Screen Size</u>: Laptops tend to be made in three size ranges. The smallest and lightest, referred to as road warriors, run from about 9 inches to 13 inches in display size. The midsize machines have 14 and 15 inch display sizes. The desktop replacement models tend to have 17 inch displays (and sometimes bigger). All would be wide-screens, meaning their height-to-width display ratio is 9x16, instead of the old 3x4 ratio. Of the midsize models, 14 inch models are generally going to be smaller and lighter, and therefore more portable, but there are more models available with 15-inch displays.

<u>Size and Weight</u>: This is also related to display size and portability, but within any given display size, some models are bigger and heavier than others. In general, less weight and size costs more. In order to achieve smaller sizes and lighter weights, manufacturers must use more exotic materials in construction of the chassis (like magnesium alloys).

<u>Durability</u>: This is also related to the engineering of and materials used in the construction of the chassis. We refer to it as the "twist" (or "squish") factor. Cheaper laptops are less rigid, which makes them more prone to motherboard failures. This becomes more of a concern if you plan to carry it around. Sounds goofy, but too many laptops are not engineered or constructed for mobility.

<u>Operating System</u>: To get the most bang for your buck, order it with Windows XP. It will actually cost more than with Vista but will be faster and more compatible with other hardware and software.

<u>Processor</u>: Don't skimp on the processor. You don't want it to go obsolete in performance terms too soon. Intel Core 2 Duo (or its AMD equivalent) is what I consider to be minimum equipment these days, especially if you want Vista. You can save a few dollars by configuring it with less of a processor, but I don't really consider this optional.

<u>Hard Drives</u>: Standard laptop hard drives spin at 5400 RPM. For data-heavy operations that would require significant use of the hard drive (digital video editing, for example), consider upgrading to a 7200 RPM hard drive. Obviously, hard drive prices go up with size, and you can also opt for ones with shock protection (like if it gets dropped)

<u>Video Graphics Accelerator</u>: Consider a higher-end video graphics adapter if you are using it for multi-media stuff like movies, digital video editing, high-end gaming, etc. This option is necessary for Vista.

<u>Higher Resolution Displays</u>: Many people would be hard pressed to tell the difference, depending on how they use their laptops, but most models offer a brighter, higher resolution display option (that obviously costs more). If you opt for this you usually have to also get the higher-end graphics adapter. Sometimes there is also a glossy finish display option, which tend to be brighter, but with the disadvantage of reflecting more light from behind.

<u>Wireless</u>: Though not in widespread use yet, N-wireless protocol is coming and is faster than G, but N-protocol wireless cards do cost more.

<u>Optical Drives</u>: Base optical drive for most models is DVD/RW, which will play CD's and DVD's but burn only CD's. DVD+/-RW's adds single-layer DVD burning capability. DL-DVD burners will do it all, including burning double-layer DVD's (format used for commercially available DVD movies). Some higher-end machines also offer blue-ray, but few people seem to opt for that one.

<u>Built-in Dial-up Modem</u>: Most people don't care about this anymore, but others like to have one just in case they are stuck somewhere that has no other internet option.

<u>Multiple USB Ports</u>: Some models come with only 2 USB ports, most have 4. If you want 4, that eliminates a few models. If you want 6, that eliminates most models (but of course this can be done with an external hub too).

<u>Camera Card Readers</u>: Most models have built-in SD/MMC camera card readers, but some don't. Without that, you can obviously transfer images almost as easily with a USB cable.

<u>Speakers</u>: Some models have stereo speakers, some have only one speaker, and some have no speakers at all (but all would have sound output jacks for connection to either external speakers or headphones).

Microphone: Some have built-in microphones.

Webcam: Some models offer optional built-in webcams.

<u>Blutooth</u>: For connecting with bluetooth devices, obviously. Some have it as standard equipment, on some it is optional, and others don't offer it at all.

<u>Warranty</u>: Standard hardware warranty for most models is a 1-year mail-in warranty. More years costs more. On-site warranty costs more. Higher end models come with a standard 3-year on-site hardware warranty. Accidental damage coverage (if you drop it, or something like that) also costs more.

<u>Color</u>: A few models allow you to choose colors, but most are plain black, gray, or silver. All models now come with built-in wireless, wide-screen displays, firewire ports (for transferring video form a digital camcorder), and at least 2 USB ports.

# Laptop Buying Checklist

Price Range: \_\_\_\_\_ to \_\_\_\_\_

Screen Size: (All Widescreen)

- $\Box$  13" Road Warrior
- □ 14" Mid-Size
- $\Box$  15" Mid-Size
- □ 17" Desktop Replacement

## Size and Weight:

- □ Not Important will mostly be sitting as desktop replacement
- □ Somewhat Important will move it around and travel with it on occasion
- $\Box$  Very Important need a road warrior, will be traveled with a lot

## <u>Durability</u>:

- □ Not Important will mostly be sitting as desktop replacement
- $\Box$  Somewhat Important will move it around and travel with it on occasion
- $\Box$  Very Important need a road warrior, will be moved and traveled with a lot

## **Operating System:**

- □ Windows XP I want a zero learning curve and better performance
- □ Windows Vista I like Vista, for some inexplicable reason
- $\Box$  Not Sure what's the difference?

## Processor:

- □ Not Important For lower demands like word processing and solitaire
- □ Somewhat Important For a mix of stuff that may require some power
- □ Very Important for high-end gaming, running multiple apps, etc.

## Hard Drives:

- $\Box$  Small (80 GB) and Slow (5400 RPM) I won't have much on it.
- $\Box$  Big (160 to 320 GB), but Slow is fine (5400 RPM).
- □ Small (80 GB) is fine, but it needs to be Fast (7200 RPM).
- $\Box$  Big (160 to 320 GB) and Fast (7200 RPM).
- □ Add Anti-Shock Technology

## Video Graphics Accelerator:

- □ Standard Video Graphics don't need high resolution video
- □ High-End Video Graphics Accelerator for multimedia and Vista

## Higher Resolution Displays:

- □ Standard Display don't need high resolution video
- □ Ultra-Sharp Display (requires high-end graphics accelerator)

Plus:

- □ Anti-Glare Matte Display
- □ Glossy Display brighter but reflect light from behind

## Wireless:

- □ G-Protocol Wireless is fine don't care about wireless speed
- □ N-Protocol Wireless equip it for the future, I care about wireless speed

## **Optical Drives:**

- DVD/RW plays CD's and DVD's but only burns CD's
- $\Box$  DVD+/-RW plays and burns CD's and DVD's
- □ DL-DVD+/-RW also burns double-layer DVD's
- $\square$  BD/DVD/CD also handles Blue-Ray discs.

### Built-in Dial-up Modem:

- $\Box$  No don't need a dial-up modem
- $\Box$  Yes need a dial-up modem

### Multiple USB Ports:

- □ 2 USB ports is enough (or I can also plug it into a USB hub at home)
- $\Box$  4 USB ports is what I need
- □ 6 USB ports is what I need

### Camera Card Readers:

- □ I don't need a built-in camera card reader
- □ I want a built-in SD/MMC camera card reader

### Speakers:

- □ No built-in Speakers (audio output jack to plug in speakers or headphones
- $\Box$  A Single built-in Speaker is fine
- $\Box$  2 Stereo built-in Speakers is what I want

### Microphone:

- □ No built-in Microphone
- □ I want a built-in Microphone

#### Webcam

- $\Box$  No built-in Webcam
- $\Box$  I want a built-in Webcam

### Blutooth:

- $\Box$  No built-in Bluetooth
- □ I want Bluetooth

### <u>Warranty</u>:

- □ 1-year Mail-in hardware Warranty
- □ 1-year On-Site hardware Warranty
- □ 2-year On-Site hardware Warranty
- □ 3-year On-Site hardware Warranty
- □ Add Accidental Damage Coverage

#### Color:

- $\Box$  I don't care about color
- □ I want a choice of colors, and the color I want is \_\_\_\_\_