



## INTERPRETIVE PLANNING - TOOL #6

### Costs for Panel Design, Fabrication, and Mounting

#### Planning and Design Costs

The cost of designing your sign can vary greatly. Factors that affect the cost include the following:

- Do you have a theme established for your sign(s)? Can you articulate the objectives that you hope to accomplish?
- How much time can forest staff devote to providing reference materials for the text?
- How many photographs, illustrations, and/or graphics are currently available? How many will CDI need to hunt down, create, or purchase?
- Do you have a forest “corporate image” already established for your signs, or will our designers be starting from ground zero? Will there be multiple signs done from the same “template”? Is there a “template” already established?
- Are you going to need a map?
- Who will be the reviewers? Will their comments be compiled and approved prior to submittal?

Given these variables, **design costs can range from \$2,000 – 3,500 per sign**. Costs include:

- ✓ Salary time for text development
- ✓ Image acquisition (finding photos, illustrations, etc. If images need to be purchased, plan on another \$50-100/image).
- ✓ Graphic layout and design
- ✓ File preparation for fabrication
- ✓ Project management
- ✓

#### Costs do NOT include:

- ✓ Contract preparation and administration (7% of total)
- ✓ Compilation of map data into a format useable by graphic designers.
- ✓ Panel fabrication
- ✓ Mounting structure



## Sign Materials

There are a wide variety of sign materials available for both indoor and outdoor interpretive sign panels. Choosing the right one is a matter of matching your needs and desires with your setting and available budget. (And don't forget to consider how the sign will be mounted!) These are some of the most common; technology will continue to rapidly change and new materials may become available.

Type	Advantages	Disadvantages	Cost of a 2" x 3' **
<b>Foam Board</b> (Gatorfoam or Fome-cor)	Good for temporary, indoor displays. Can be constructed in-house.	Not very durable – has a short (1-season) lifespan.	\$50
<b>Vinyl</b> (usually 3M products)	Can be made very large (up to 52" x over 100 feet long). Is thin and lightweight, so can be laminated in plastic, and then mounted on plywood, metal, acrylic, or other substrates.	Not very durable. Best for temporary displays (2-3 years, although some warranties are for 5). May bubble in very hot climates.	\$165-200 (1/8" thick)
<b>Fiberglass Embedment</b> (digital output encapsulated in clear fiberglass)	Resistant to shattering, weathering, fading, and graffiti. Excellent colors and resolution. Warranties are generally for 10 years.	May need to occasionally buff with sandpaper or car polish. Edges not as attractive as high pressure laminate.	\$200-300 (1/8" thick)
<b>High Pressure Laminate</b> (digital output encapsulated in clear plastic resin)	Resistant to shattering, weathering, fading, and graffiti. Excellent colors and resolution. Warranties come anywhere from 10-20 years.	Can be scratched or damaged, but takes a lot of effort. Panels .5" thick can be mounted without frames.	\$300-400 (1/8" thick)
<b>Anodized Aluminum</b> (gold, bronze, or silver-toned etched metal)	Very durable, low maintenance, impervious to harsh weather. Attractive for recognition plaques, and designs with line drawings.	Can be scratched. Colors are very limited (can't easily do photographs or illustrations.) Can't do really large signs.	\$450-600 (1/8" thick, color)
<b>Engraved Stone</b>	Very durable, impervious to harsh weather. Can be very compatible with outdoor settings. Can incorporate color and photographs.	Can be broken with heavy objects. Engraved details can collect dirt and debris so require periodic washing.	\$900 - \$1,500 (\$125 - \$250 per sq. ft.)
<b>Porcelain Enamel</b> (ceramic coating on metal.)	Outstanding color and resolution. Often guaranteed for 25 years. Extremely weather and vandal resistant. Requires very little maintenance.	Can be chipped or shattered by bullets, tire irons, or other heavy objects. Blowing sand can mar the surface.	\$1,500 for black and white; \$2,500 for 4-color; \$3700 for full color.

**DISCLAIMER:** Costs are shown as fabrication estimates only. Actual costs can vary widely depending on the quantity of signs ordered, freight charges, size and thickness of signs, industry innovations, and market competition. Cost estimates are as of 1/05. (Costs do not include design, mounting structures, and installation.)



## Mounting Structures and Exhibit Bases

Mounting structures and exhibit bases vary widely, depending on site characteristics, the ROS class, maintenance level desired, budget, accessibility, and other factors. Costs can range from several thousand dollars for a custom design, to a few hundred for a simple frame base.



As an example of a simple exhibit base, the style shown at the left is a simple “Hopewell” base that is easy to install (CDI can provide instructions) and relatively inexpensive. A standard 3' x 2' frame costs approximately \$400 – \$600.

## Cost Estimate Worksheet

Item	Material	Size & Quantity	Cost
Planning and Design			
Fabrication			
Installation			
Exhibit Base/ Mounting Structure			
<b>TOTAL</b>			