

Virtual & Real Maps:

Are They Interchangeable?

**Library of Congress
National Digital Information
Infrastructure and Preservation
Program - Framing a National
Preservation and Access
Strategy for Geospatial Data
11/12/2009**

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Real Maps

According to Moellering (1984),
A real map is a cartographic
product, which can be handled
physically and usually carried
around with relative ease.



Virtual Maps

Can a map that is represented in one of many ways in a digital environment be replicated to affect the same result as the original document or file?

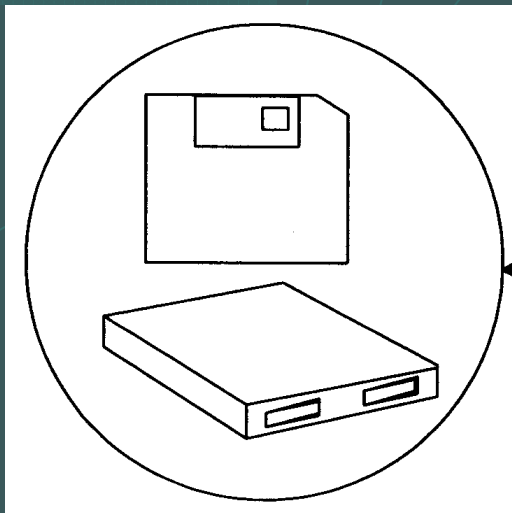
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Virtual Map (type 1).
Has a directly viewable
cartographic image but
only a transient reality
as a CRT map image.



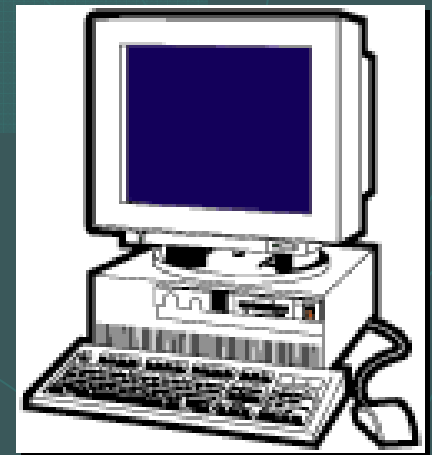
Virtual Map (type 2).

Has a permanent tangible reality, but cannot be directly viewed as a cartographic image. These are all hard copy media, but in all cases these products must be further processed before made viewable.



Virtual Map (type 3).

Has neither of the characteristics of the earlier classes, but can be converted into a real map as readily as the other two classes of virtual maps. Computer based information in this form is usually very easily manipulated.



Directly Viewable as a Cartographic Image

Permanent
Tangible
Reality

		Yes	No
Permanent Tangible Reality	Yes	<p>Real Map</p> <ul style="list-style-type: none"> • Conventional Sheet Map • Globe • Ortho-Photo Map • Machine Drawn Map • Computer Output Microfilm • Block Diagram • Plastic Relief Model 	<p>Virtual Map – Type 2</p> <ul style="list-style-type: none"> • Traditional Field Data • Gazetteer • Anaglyph • Film Animation • Hologram (stored) • Fournier Transform (stored) • Laser Disk Data
	No	<p>Virtual Map – Type 1</p> <ul style="list-style-type: none"> • CRT Map Image refresh storage tube • plasma panel • Cognitive Map (two-dimensional image) 	<p>Virtual Map – Type 3</p> <ul style="list-style-type: none"> • Digital Memory (data) • Magnetic Disk or Tape (data) • Video Animation • Digital Terrain Model • Cognitive Map (relational geographic information)

