



# Technical Communication Fundamentals

## Chapter 3: Visual Design

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# ABC Format for Documents

- *Abstract*: The “Big Picture” for Decision-Makers
  - Common headings include...
    - Summary
    - Executive Summary
    - Introductory Summary
    - Overview
    - Introduction



# ABC Format for Documents

- *Body: Details for All Readers*
  - Includes supporting information
    - Background of the project
    - Field, lab, office, or other work upon which the document is based
    - Details of any conclusions, recommendations, or proposals



# ABC Format for Documents

- *Conclusion: Wrap-Up* Leading to the Next Step
  - Brings readers back to one or more central points mentioned in body
  - Provides closure to the document
  - Leads to the next step in writer's relationship



# Visual Design

- Elements of Page Design
- Elements for Navigation
- Fonts
- General Guidelines for Graphics
- Specific Guidelines for Six Graphics
- Misuse of Graphics
- Computers In the Visual Design Process



# Elements of Page Design

- White Space
- Lists
- In-Text Emphasis



# Elements of Page Design

- White Space
  - Attracts attention
  - Guides the eye to important information on the page
  - Relives the boredom of reading text
  - Helps readers organize information



# Elements of Page Design

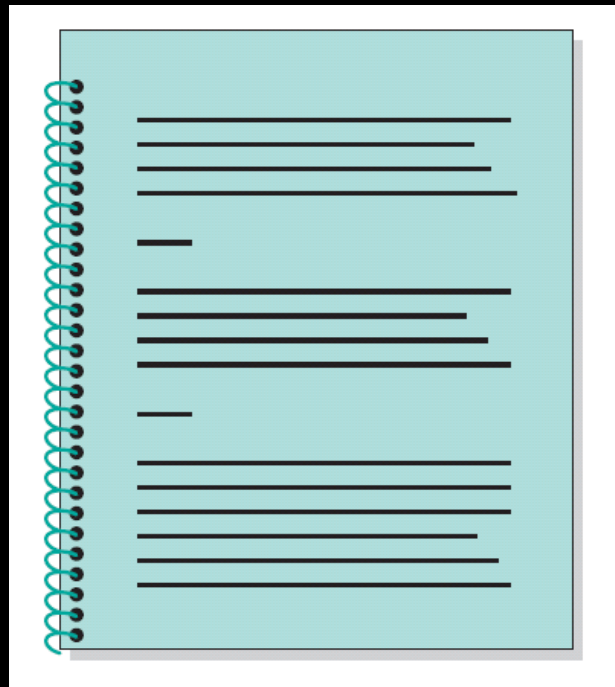
- White Space
  - Margins
    - Use 1” to 1 ½” for most documents
    - Use more space on left margin for bindery
    - Use more space on bottom of page





# Elements of Page Design

## Use of White Space—Margins





# Elements of Page Design

- White Space
  - Hanging Indents
    - Blocks of text to emphasize headers
    - Bulleted and numbered lists



# Elements of Page Design

## Use of White Space—Hanging Indents





# Elements of Page Design

- White Space
  - Line Spacing
    - Use single spacing for letters, memos, short reports
    - Use 1 ½-space or double-spaced for longer documents



# Elements of Page Design

- White Space
  - Paragraph Length
    - Give readers the chance to regroup
    - Shape reader expectations



# Elements of Page Design

## Use of White Space—Paragraph Length

Poor Format: One long paragraph on page

Better Format: Several paragraphs on page



# Elements of Page Design

- Lists
  - Cluster items for easy reading
  - Groups of three to ten items
  - Use lists for
    - Examples
    - Reasons for a decision
    - Conclusions or recommendations
    - Steps in a process
    - Cautions or warnings
    - Limitations or restrictions



# Elements of Page Design

- Lists
  - Use bullets or numbers as appropriate
  - Format for ease of reading
  - Use parallel lead-in words
  - Punctuate and capitalize consistently





# Punctuation: Lists

- No Punctuation after listed items
  - Site preparation
  - Foundation design
- Treat the list like a sentence series
  - Site preparation, and
  - Foundation design
- Treat each item like a separate sentence
  - We will need six boreholes.
  - Sampling and testing should start soon.



# Elements for Navigation

- Headings
  - Brief labels used to introduce new sections or subsections
    - Headings serve as a...
      - signpost for readers
      - grabber to entice readers
      - visual “oasis” of white space



# Elements of Page Design

- Headings
  - Use your outline to create headings and subheadings
  - Use substantive wording
  - Maintain parallel form in wording
  - Establish clear hierarchy



# Elements for Navigation

- Running Headers and Footers
  - Page numbers, chapter titles, page numbers, graphic elements
  - Help readers locate information

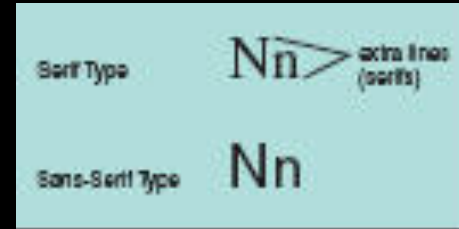


# Color

- Focus attention of important details
- Limit use of color
  - Color is expensive in professionally printed documents
  - Color printing on desktop printers can be slow

# Using Fonts

- Font Types
  - Serif fonts
  - Sans-serif fonts
- Type Size
  - 10-12 point type is most common
  - Type size appears varies from font to font





# General Guidelines for Graphics

- Determine the Purpose of the Graphic
- Evaluate the Accuracy and Validity of the Data
- Refer to All Graphics in the Text
- Think About Where to Put Graphics
- Position Graphics Vertically When Possible
- Avoid Clutter
- Provide Titles, Notes, Keys, and Source Data



# Specific Guidelines for Graphics

- Tables
- Pie Charts
- Bar Charts
- Line Charts
- Flowcharts
- Technical Drawings





# Specific Guidelines for Graphics

- Tables
  - Use Informal Tables as Extensions of Text
  - Use Formal Tables for Complex Data Separated from Text
  - Use Plenty of White Space
  - Follow Conventions for Dividing and Explaining Data
  - Pay Special Attention to Cost Data

# Tables

**TABLE 22: Employee Retirement Fund**

<b>Investment Type</b>	<b>Book Value</b>	<b>Market Value</b>	<b>% of Total Market Value</b>
Temporary Securities	\$ 434,084	434,084	5.9%
Bonds	3,679,081	3,842,056	52.4
Common Stocks	2,508,146	3,039,350	41.4
Mortgages	18,063	18,063	0.3
Real Estate	1,939	1,939	nil
<hr/> Totals	<hr/> \$6,641,313	<hr/> \$7,335,492	<hr/> 100.0%

Note: This table contrasts the book value versus the market value of the Employee Retirement Fund, as of December 31, 2010.

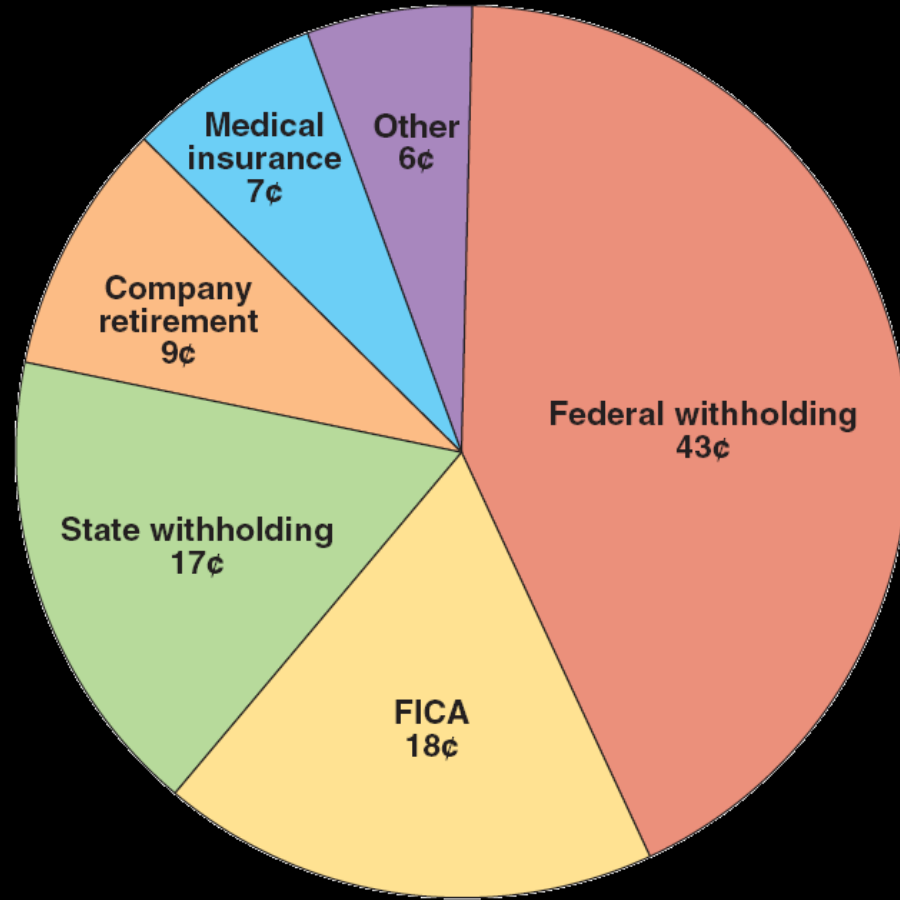


# Specific Guidelines for Graphics

## ■ Pie Charts

- Use Pie Charts Especially for Percentages and Money
- Use No More Than 6 or 7 Divisions
- Move Clockwise from 12:00, from Largest to Smallest Wedge
- Be Creative, But Stay Simple
- Draw and Label Carefully

# Pie Charts

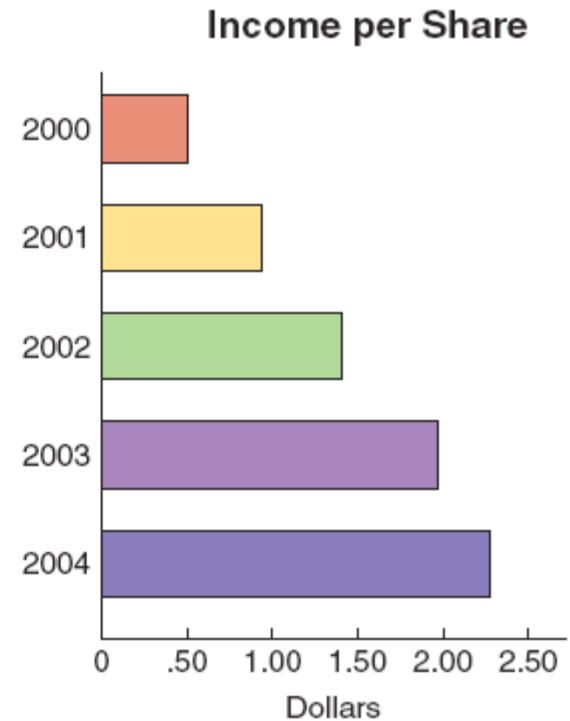
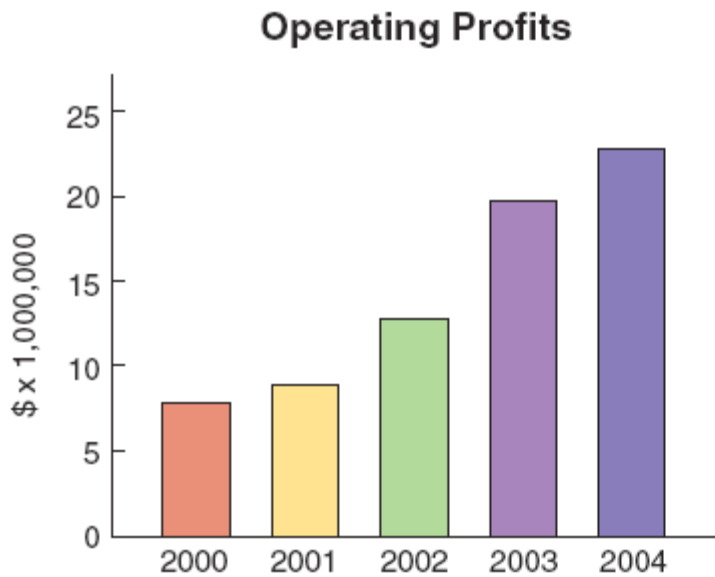




# Specific Guidelines for Graphics

- Bar Charts
  - Use a Limited Number of Bars
  - Show Comparisons Clearly
  - Keep Bar Widths Equal and Adjust Space Between Bars Carefully
  - Carefully Arrange the Order of Bars
  - Be Creative

# Bar Charts



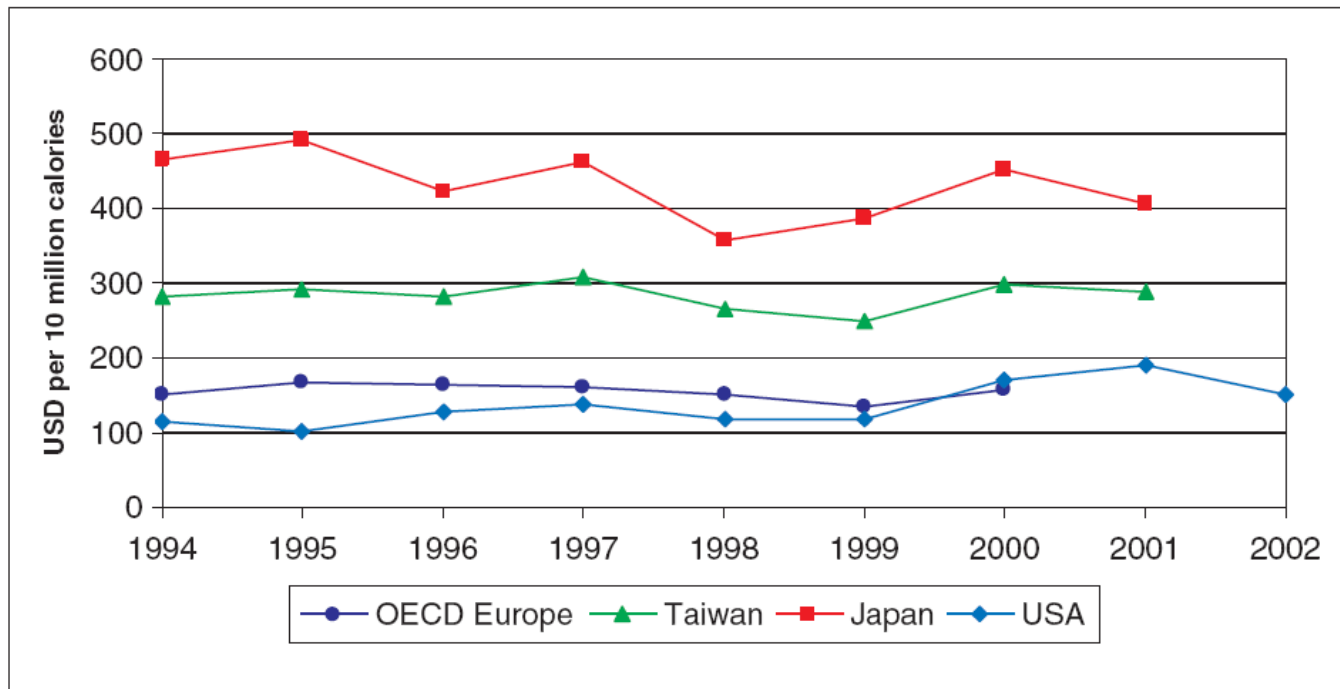


# Specific Guidelines for Graphics

- Line Charts
  - Use Line Charts for Trends
  - Locate Line Charts with Care
  - Strive for Accuracy and Clarity
  - Do Not Place Numbers on the Chart Itself
  - Use Multiple Lines with Care

# Line charts

Figure A9-3: Industrial Sector Gas Prices in the United States, OECD Europe, Japan, and Taiwan, 1994-2002, in 2003 Dollars



Source: *The Economic Future of Nuclear Power: A Study Conducted at The University of Chicago* (August 2004): A9-A13.

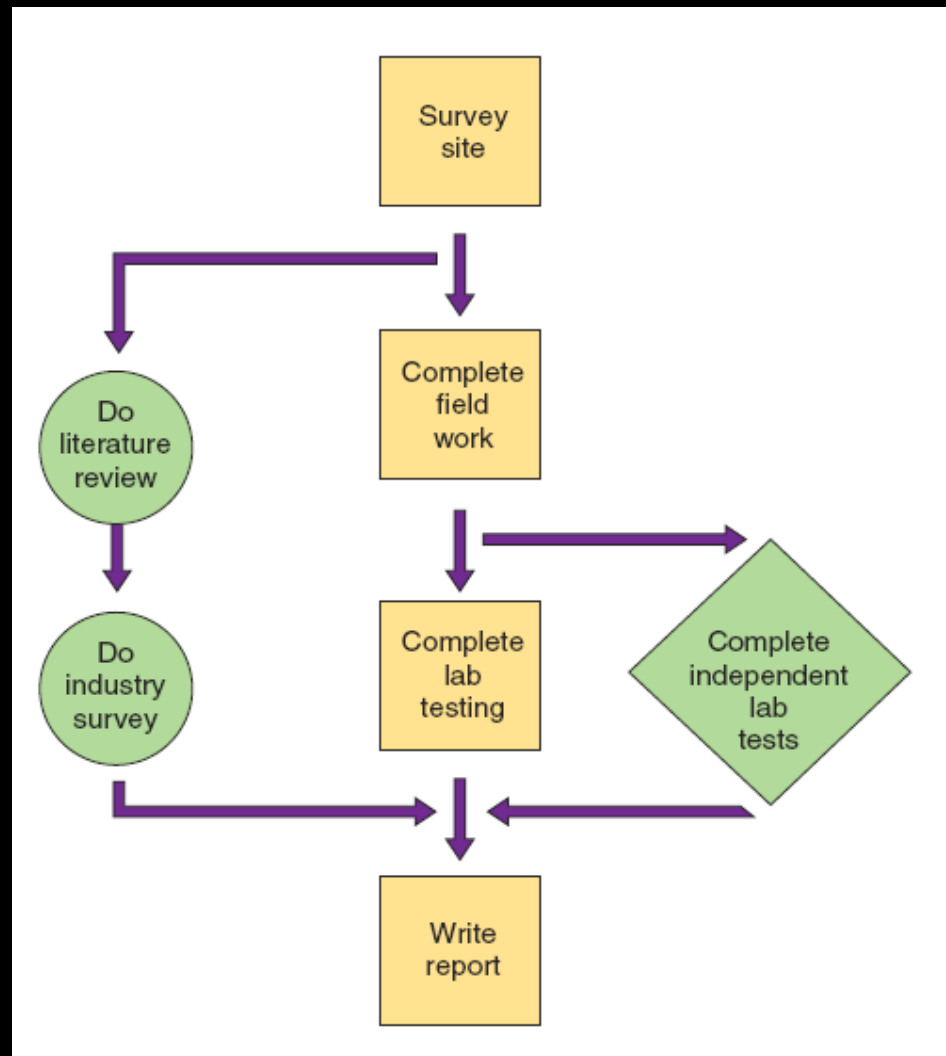




# Specific Guidelines for Graphics

- Flowcharts
  - Present Only Overviews
  - Limit the Number of Shapes
  - Provide a Legend When Necessary
  - Run the Sequence from Top to Bottom or from Left to Right
  - Label All Shapes Clearly

# Flowcharts

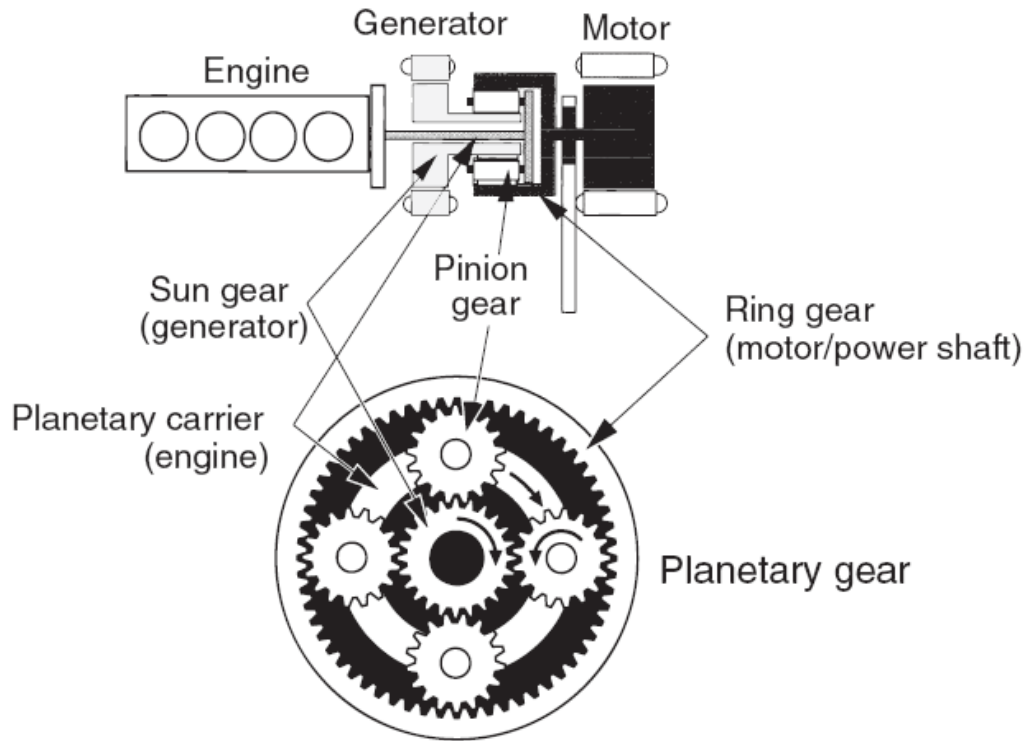




# Specific Guidelines for Graphics

- Technical Drawings
  - Choose the Right Amount of Detail
  - Label Parts Well
  - Choose the Most Appropriate View
  - Use Legends When There Are Many Parts

# Technical Drawings



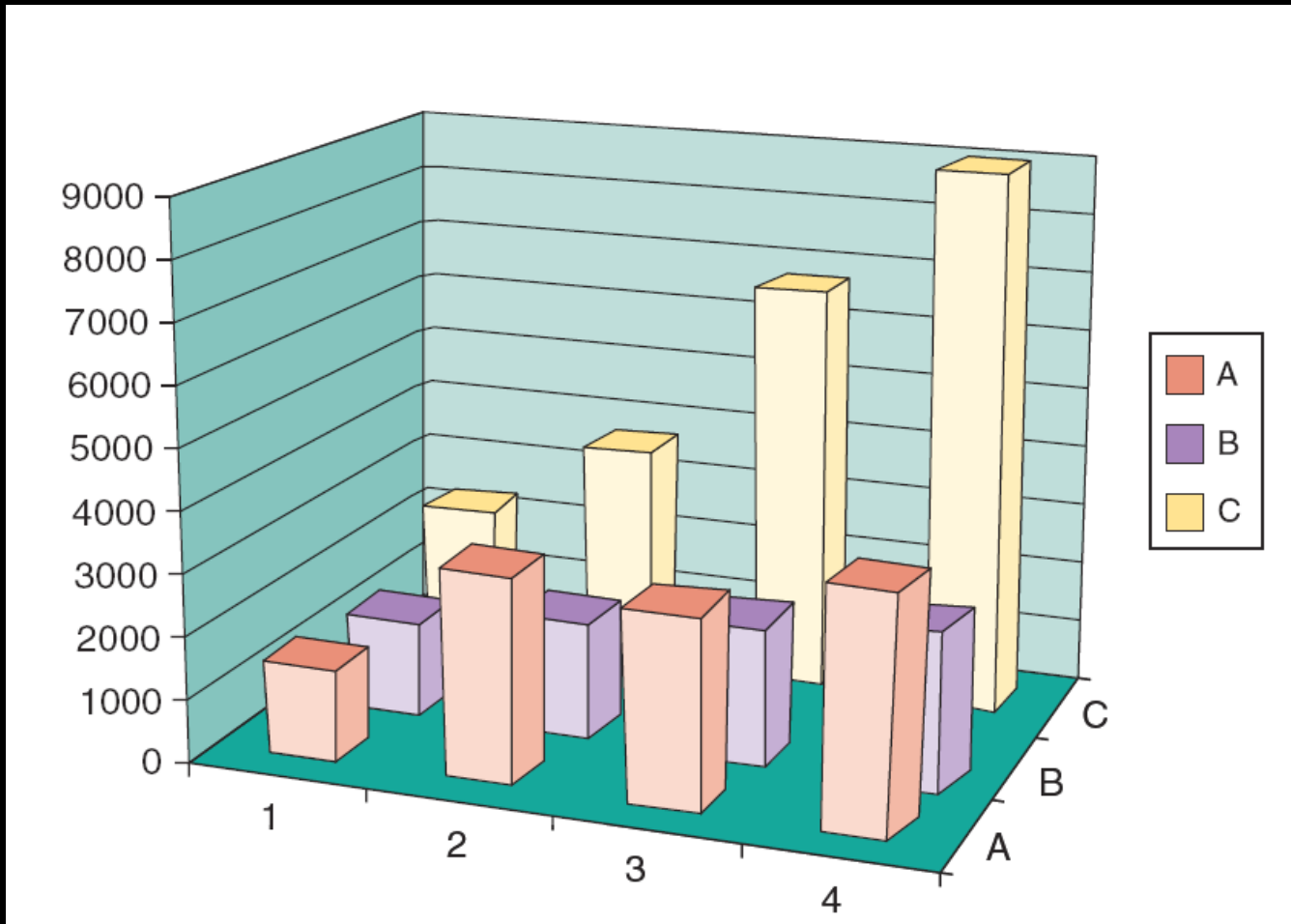
Source: Toyota Motor Corporation., Toyota Hybrid System (May 2003): 10



# Misuse of Graphics

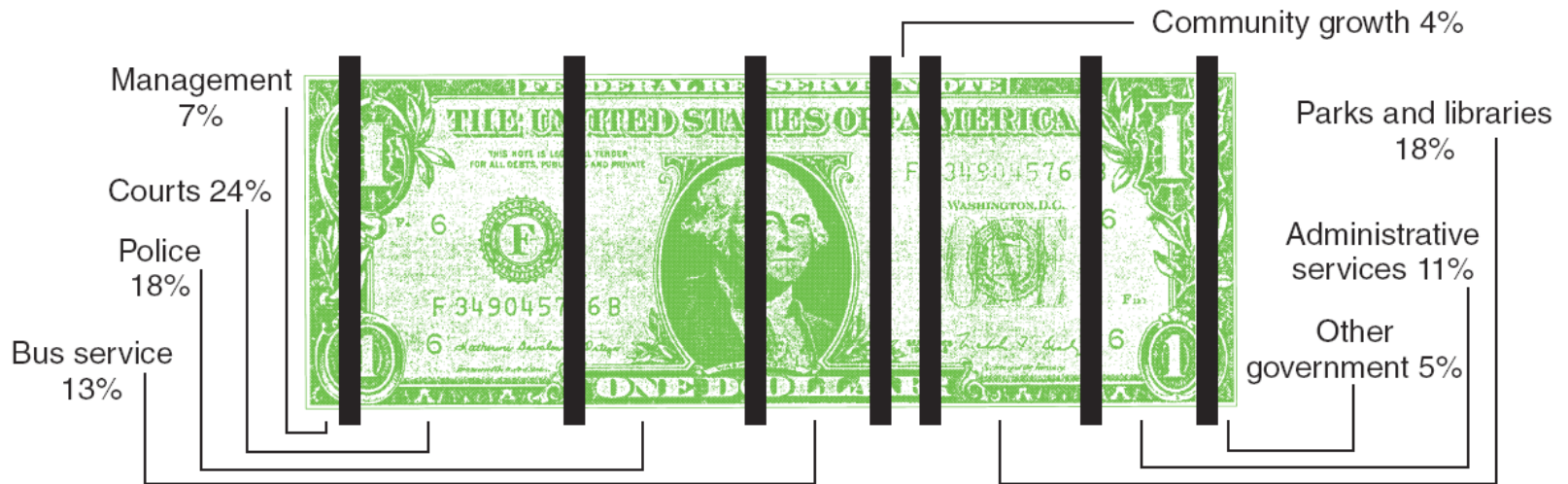
- Confusing Bar Charts
- Chartjunk
- Confusing Pie Charts

# Confusing Bar Charts



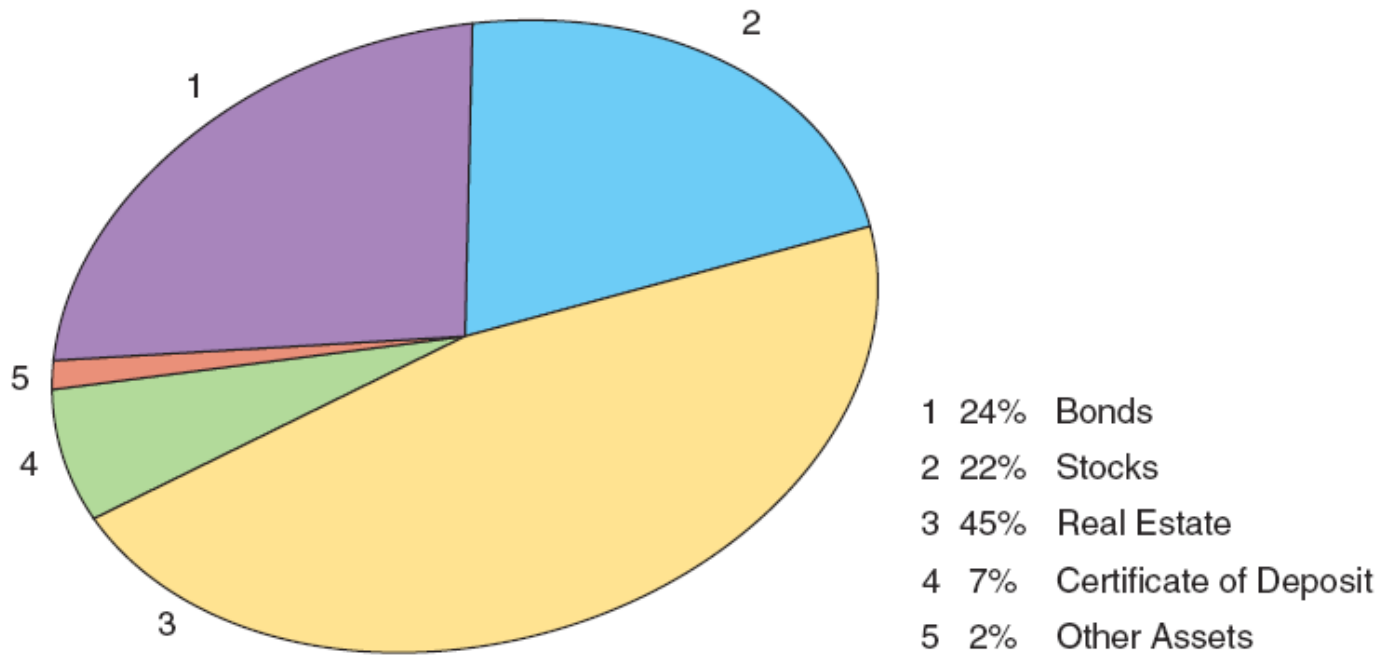
# Chartjunk

## Where Your County Taxes Are Spent



# Confusing Pie Chart

ASSETS OF JONES RETIREMENT FUND







# Computers in the Page Design Process

- Templates
  - Quick formatting of documents
  - Reuse for multiple documents of the same kind
- Style Sheets
  - Consistent formatting
  - Tagged elements can generate tables of contents

# Computers in the Page Design Process

