

LI- WSDOT's Performance Journalism: A Proven Approach for Effective Communication of Results

Clinton McCarthy

Performance Reporting Manager, Strategic Assessment Office

Kimberly Howard

Gray Notebook Production Manager, Strategic Assessment Office

Washington State Department of Transportation

Transportation Planning Symposium

November 15, 2007



“We have all worked hard over our careers (and particularly in the last six years!) to demonstrate to the public and elected officials that we are an agency that gets things done, and can be trusted with the funds we are given. We have gained credibility as a premier transportation agency over the years, and we know we can do even better”.

- Paula Hammond,
WSDOT “Interim” Secretary of Transportation on
October 15, 2007



Even when an agency is performing well, it is still possible that citizens can be dissatisfied with agency performance. Why?

- Dissatisfaction occurs when an agency does not effectively communicate performance to citizens.
- The onus is on the agency to effectively communicate its performance and solicit citizen input.
- Reporting on performance measures is an opportunity to tell the story and provide information that allows citizens and policy-makers to understand the message



The problem is that citizens are not understanding the message.

- Agencies, being the technical experts that they are, often make the mistake of reporting performance from an unnecessarily complex and/or technical perspective.
- The communication of performance information must be done in an effective manner that provides citizens with the tools they need to understand and evaluate

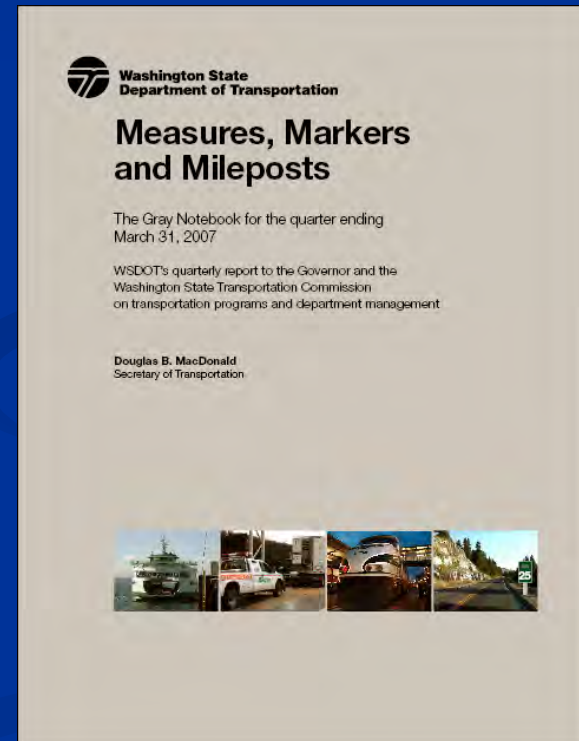


Effective Communication: A Practitioner's Guide to Performance Journalism

- The combination of quantitative reporting and storytelling
- Share the performance of an agency's complex and diverse programs and projects clearly and concisely in a format that everyone can easily understand and explain to their neighbors.
- A collaborative effort between executives, performance analysts, and program experts across the agency is essential- no silos allowed!

The Seven Principles of Performance Journalism

1. Good Stories
2. Good Writing
3. Good Data
4. Good Graphics
5. Good Format/Presentation
6. Quality Control
7. Good Timing





Principle One: Good Stories Combined With Good Graphics: Use Narrative Reporting To Make It Real And Tell The Story

- Clear, concise, unbiased writing using the *what, why, who, and when* approach is the key to this first principle
- Narrative Reporting Requires Discipline
- Be an investigative reporter
- Candor builds credibility: Tell the story of when things go right and wrong

Example of candid, narrative reporting

A Perfect Storm: WSDOT Learns From Its Mistakes

WSDOT's Winter Maintenance programs have continued to develop over time in order to improve road conditions when severe winter weather strikes, however, on November 27th, 2006 a series of winter weather conditions hit the central Puget Sound region that ended up temporarily paralyzing drivers on highways and local roads in some of the worst conditions possible. The situation brought forth an opportunity to evaluate Winter maintenance performance and where improvement was needed.

WSDOT utilizes a private weather forecasting organization throughout the year in order to prepare for severe inclement weather. Predictions called for one inch of snow, followed by rain/snow mix. WSDOT usually uses a sand mixture to improve traction when conditions include snow and rain mixes. Unfortunately, below freezing (32°F) temperatures and four additional inches of snow arrived. The storm hit central Puget Sound beginning at 4:00 pm, the traditional start of rush hour.

The last complication came after 10:00 pm, when a Monday Night Football game ended at Qwest Field in Seattle. More than 50,000 people immediately entered the freeway system, and were quickly isolated in congestion and decreasing temperatures. Some ended up spending cold evenings in their cars before weather conditions let up enough for WSDOT and King County maintenance vehicles to improve conditions.

After the storm WSDOT publicly addressed its maintenance performance and indicated where it could improve. Although all plows were operational and sand and deicer were well stocked, WSDOT learned that these tools are only effective when storm conditions are analyzed correctly. WSDOT must also accurately communicate to drivers about commutes, driving conditions and preparedness recommendations. Such changes were implemented in storms that arrived later in the winter season, with better performance results.



On November 27 2006, a snow and ice storm paralyzed central Puget Sound. WSDOT's maintenance efforts fell short, but gave the department an opportunity to learn and improve performance.



Principle Two: Good Writing: Use a Reader Friendly Approach

- Use plain English that is clear, concise, and free of industry jargon
- Could someone (i.e. your mother) take that information presented in graphical and text form and explain it to her next door neighbor over the weekend barbeque?
- Good writing does not mean “dumbing down” the narrative

Example of good writing

Before - First Draft

Intersections that are projected to operate with especially long delays or overcapacity during the PM peak hour are identified as “congested intersections”. These intersections are those that operate under LOS F conditions (average vehicle delay of greater than 80 seconds) or ICU greater than 100 percent. Congested intersections are further identified as “highly congested” if they exceed 110 seconds of average vehicle delay and have an ICU of greater than 110 percent

Before - First Draft

SR 4, Svenson’s Curve - Realignment

This project is on hold as the result of a recent court ruling. Wahkiakum County Circuit Court ruled against WSDOT’s necessity to take an entire adjacent parcel for use as a construction waste site for an estimated 80,000 cubic yards of excess, excavated soil material. The advertisement date has been deferred to the 2015-2017 biennium, providing time to 1) investigate potential alternative waste sites, 2) determine right-of-way and construction cost impacts and, 3) if required, secure additional funding. It is projected that the right-of-way and construction costs will be higher as there are very limited options for other nearby potential waste sites. When final cost impacts are determined, WSDOT will ask for legislative direction on whether to proceed with the project.

After - What Printed

What are congested and highly congested intersections? Congested intersections are intersections that cause drivers considerable delay. A driver might wait between one and two minutes to get through a traffic signal at a congested intersection. At a highly congested intersection, a driver might wait two minutes or more to get through the traffic signal.

After - What Printed

SR 4, Svenson’s Curve - Realignment

The advertisement date has been deferred from January 2006 to April 2012. The project is on hold as the result of a recent court ruling against condemnation for an entire adjacent parcel needed as a construction waste site for an estimated 80,000 cubic yards of excess excavated soil material. The deferral is necessary to provide time for investigating alternate waste sites and determine right-of-way and construction cost impacts. It is projected that the right-of-way and construction costs will be higher as there are very limited options for other nearby potential waste sites. When final cost impacts are determined, WSDOT will ask for legislative direction on whether to proceed with the project.



Principle Three: Good Data

- Unyielding pursuit for data integrity and quality
- Agencies must balance this need for data perfection against a need to publish in a timely manner
- Address the issue of incomplete or data limitations

Example of good data application

Washington State Traffic Fatalities, 2000-05

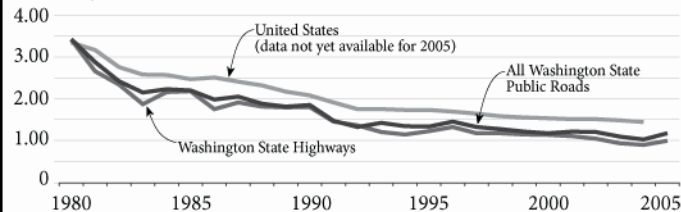
2000	2001	2002	2003	2004	2005
631	649	659	600	567	649 (Preliminary data) ¹

Source: Fatal Accident Reporting System (FARS)

¹WSDOT counts an additional 6 deaths for 2005. See gray box to the right.

Traffic Fatality Rates in Washington Compared to the National Average

Fatalities per 100 Million VMT, 1980-2005



Provided by: WSDOT-Traffic Data Office

Sources: U.S. Fatalities/Vehicle Miles Traveled (VMT): National Highway Traffic Safety Administration (NHTSA) Traffic Safety Facts; WA Fatalities: Fatal Accident Reporting System (FARS); State Highway Fatalities: WSDOT-Traffic Data Office; WA VMT: WSDOT-Traffic Data Office

Source: Excerpt from one page of Measures, Markers, and Mileposts, June 30, 2006

FARS Fatality Count and WSDOT Fatality Count

There are two key differences between the two systems used to track data. First, to qualify as a FARS case there must be a motorized vehicle involved in the crash. WSDOT, following the direction given by the Blue Ribbon Commission on Transportation, includes non-auto-related fatalities on the highways. In addition, FARS does not count traffic fatalities due to natural catastrophic events, whereas WSDOT does count those fatalities. A more complete description of these differences is available in the Transportation Benchmarks Safety Goal article on page 74.



Principle Four: Good Graphics. Every Graph Tells A Story, Every Graph Asks A Question

In general, good performance journalism graphics:

- Are quickly comprehended and understood by the reader
- Are relevant to the data and topic
- Are formatted with a sense of balance, proportion, and clarity of design
- Can stand on their own if lifted from the page
- Have data, analysis and scale integrity
- Answer some *fundamental* questions



Effort was great! Data was good!
Presentation was lousy.
Impact was poor.

The Key to Effective Communication:

- A Step-by-Step, Practical, How-to that Anyone Can Do
- How to deconstruct and reconstruct Excel

Provided: With appreciation to **Edward Tufte**, Professor Emeritus of Yale University, and to **Barb Felver** of the Washington State Department of Social and Health Services

Figure VI-1 Average Annual Wages by Sex, 1979 & 1989

REMOVE
SHADING

Men continued to earn higher incomes than women. . .

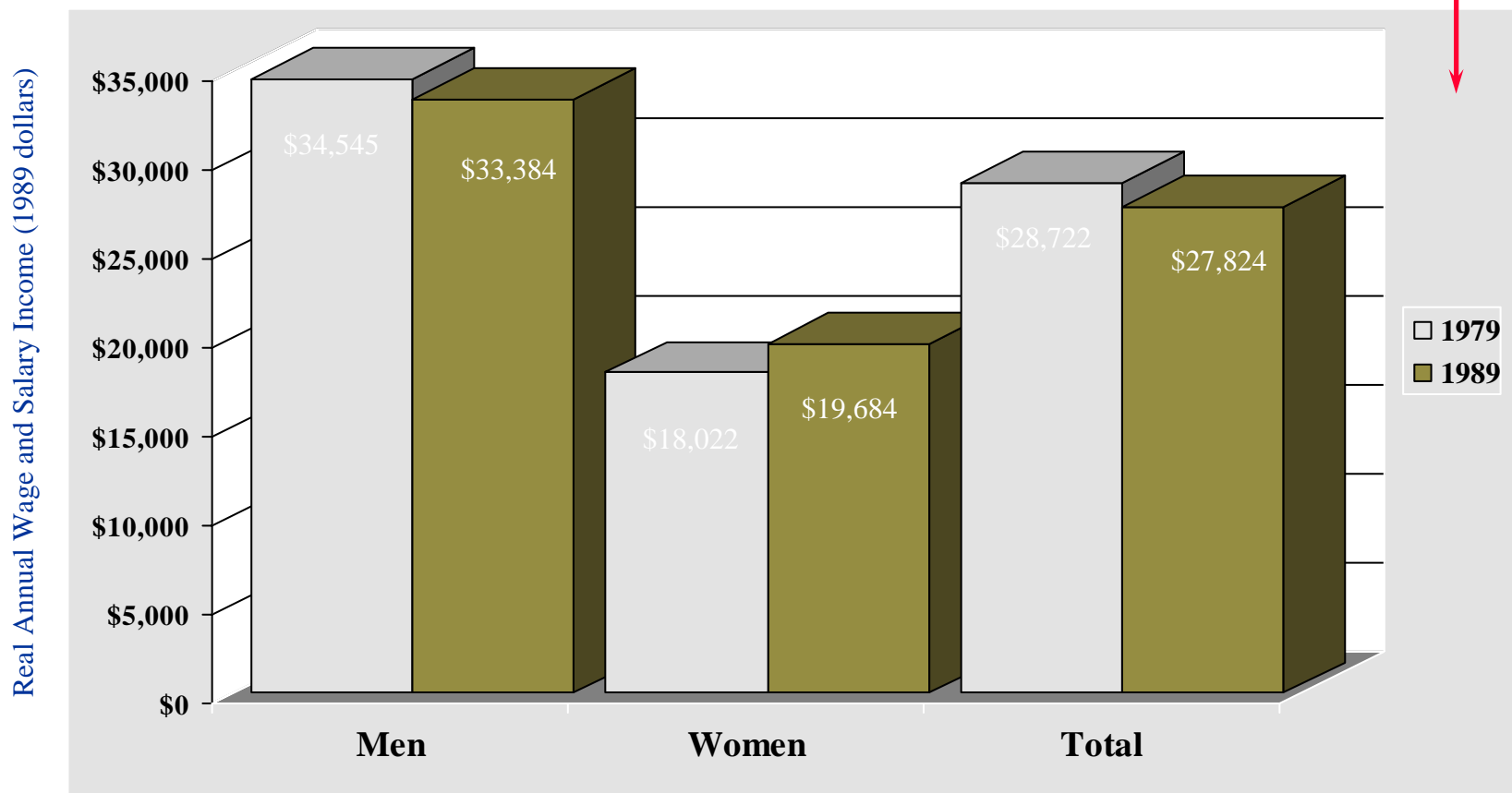


Figure VI-1 Average Annual Wages by Sex, 1979 & 1989

REMOVE
BOX
↓

Men continued to earn higher incomes than women. . .

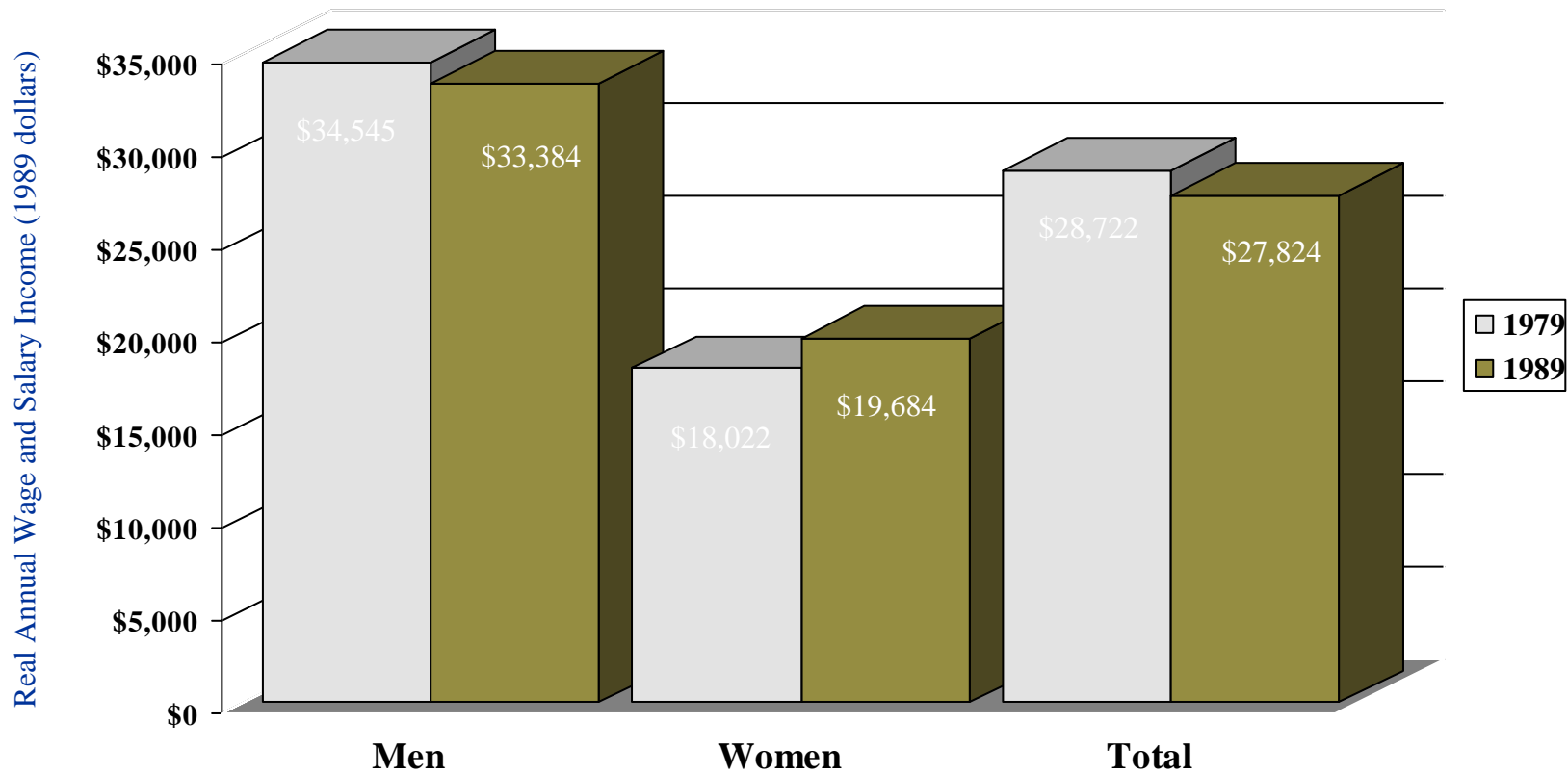


Figure VI-1 Average Annual Wages by Sex, 1979 & 1989

REMOVE
3D

Men continued to earn higher incomes than women. . .

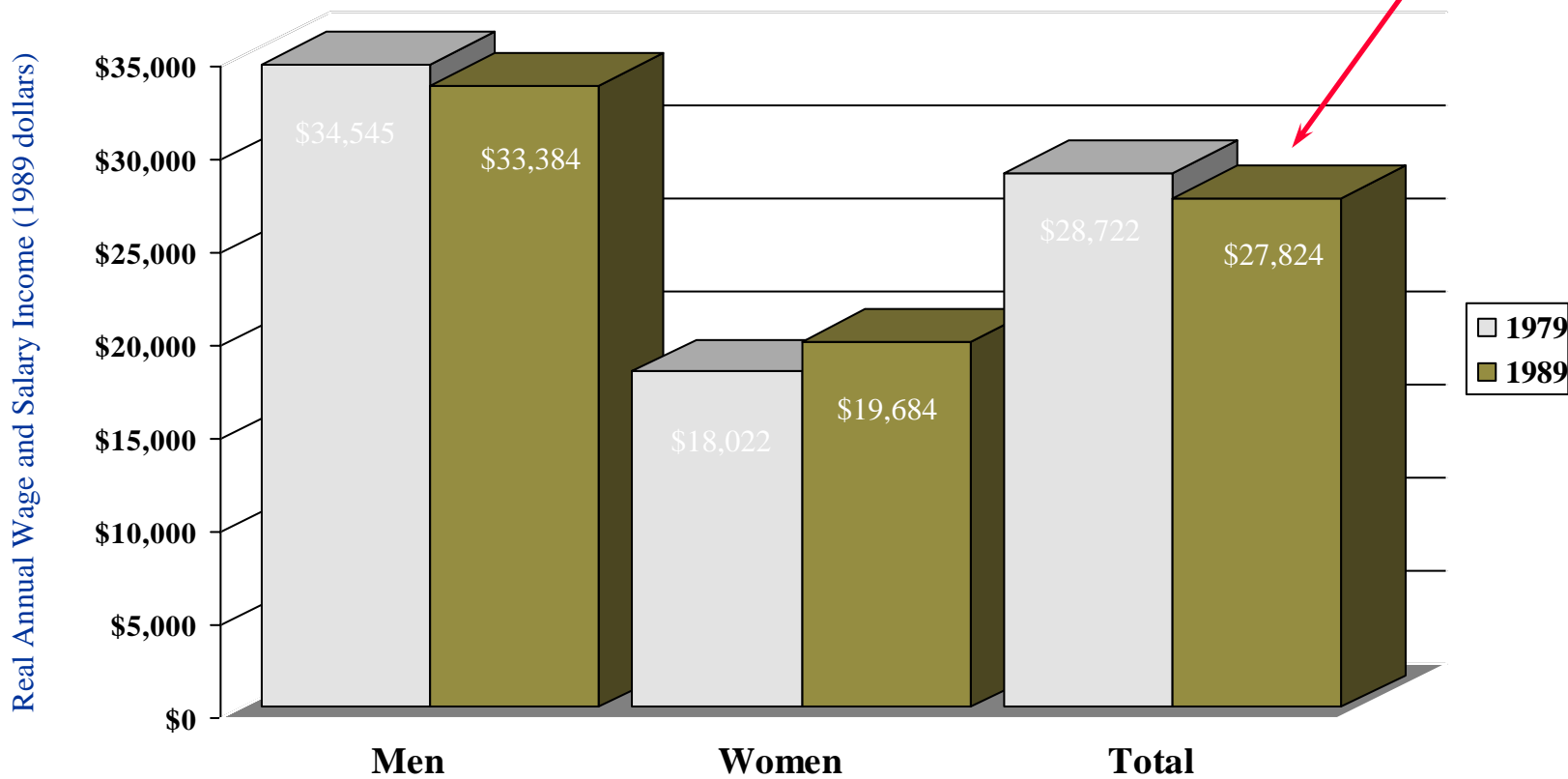


Figure VI-1 Average Annual Wages by Sex, 1979 & 1989

REMOVE
GRIDLINES

Men continued to earn higher incomes than women...

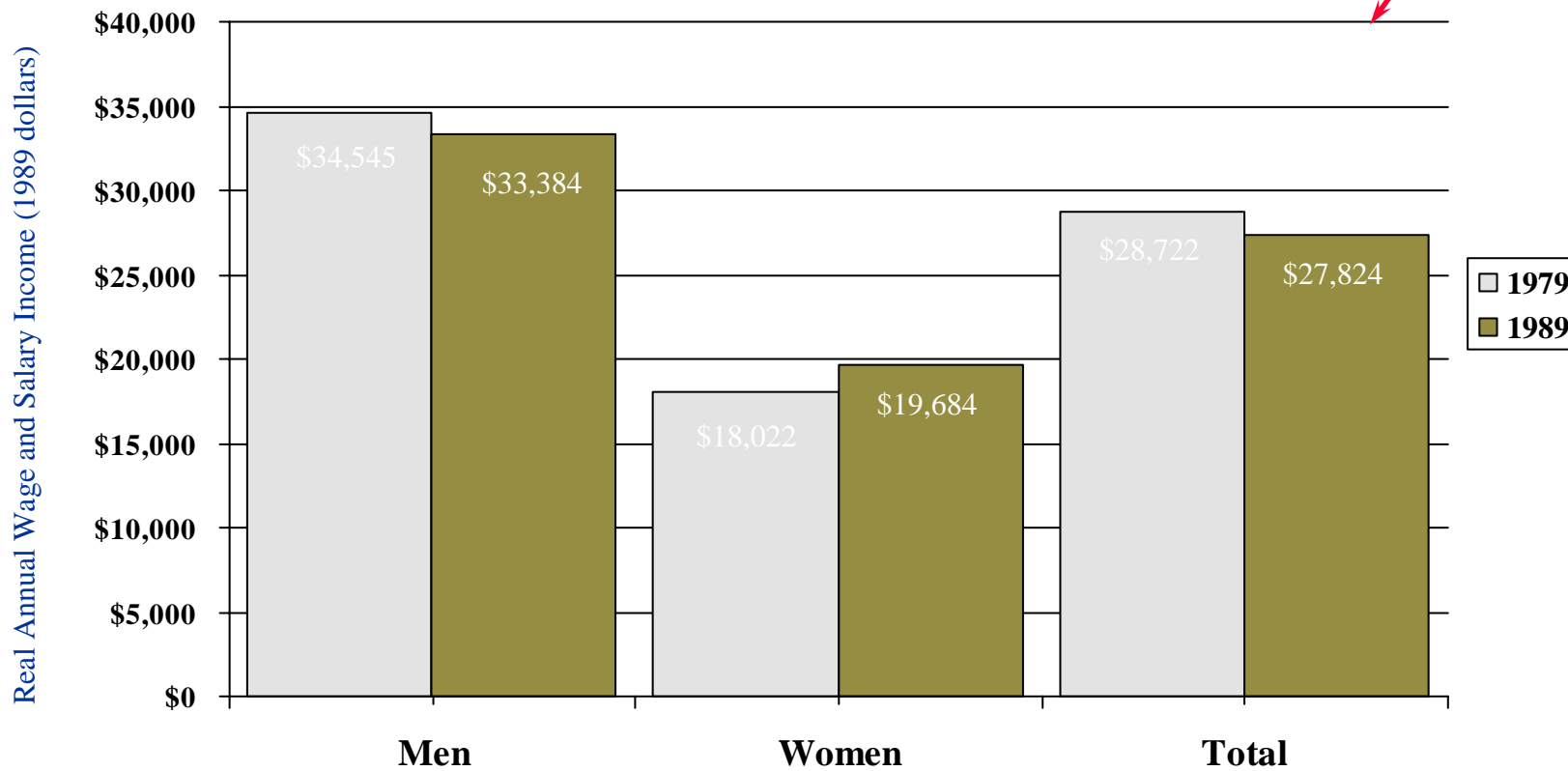
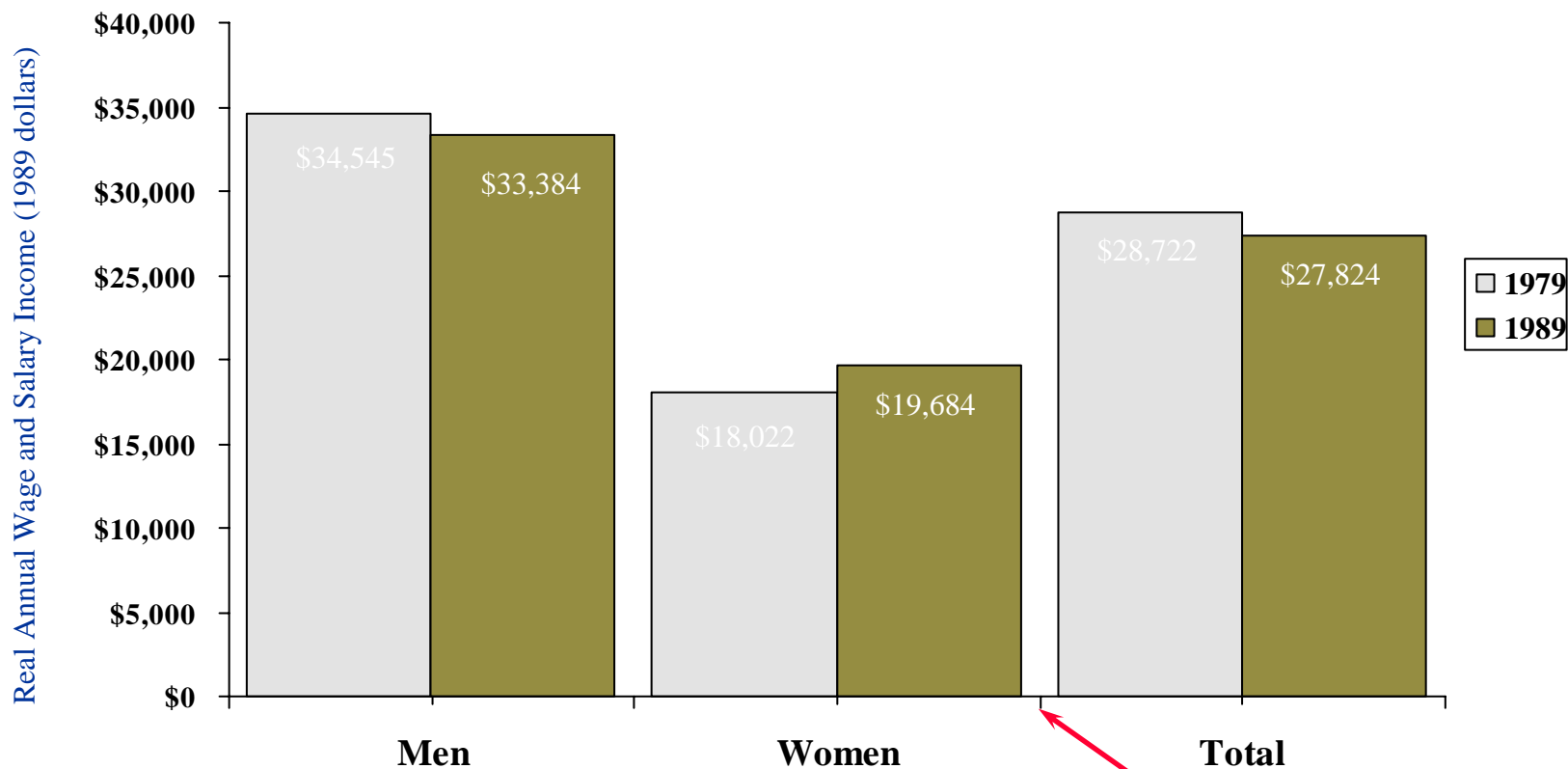


Figure VI-1 Average Annual Wages by Sex, 1979 & 1989

Men continued to earn higher incomes than women. . .



**REMOVE
TICK MARKS**

Figure VI-1 Average Annual Wages by Sex, 1979 & 1989

Men continued to earn higher incomes than women. . .



Figure VI-1 Average Annual Wages by Sex, 1979 & 1989

Men continued to earn higher incomes than women. . .

Real Annual Wage and Salary Income (1989 dollars)

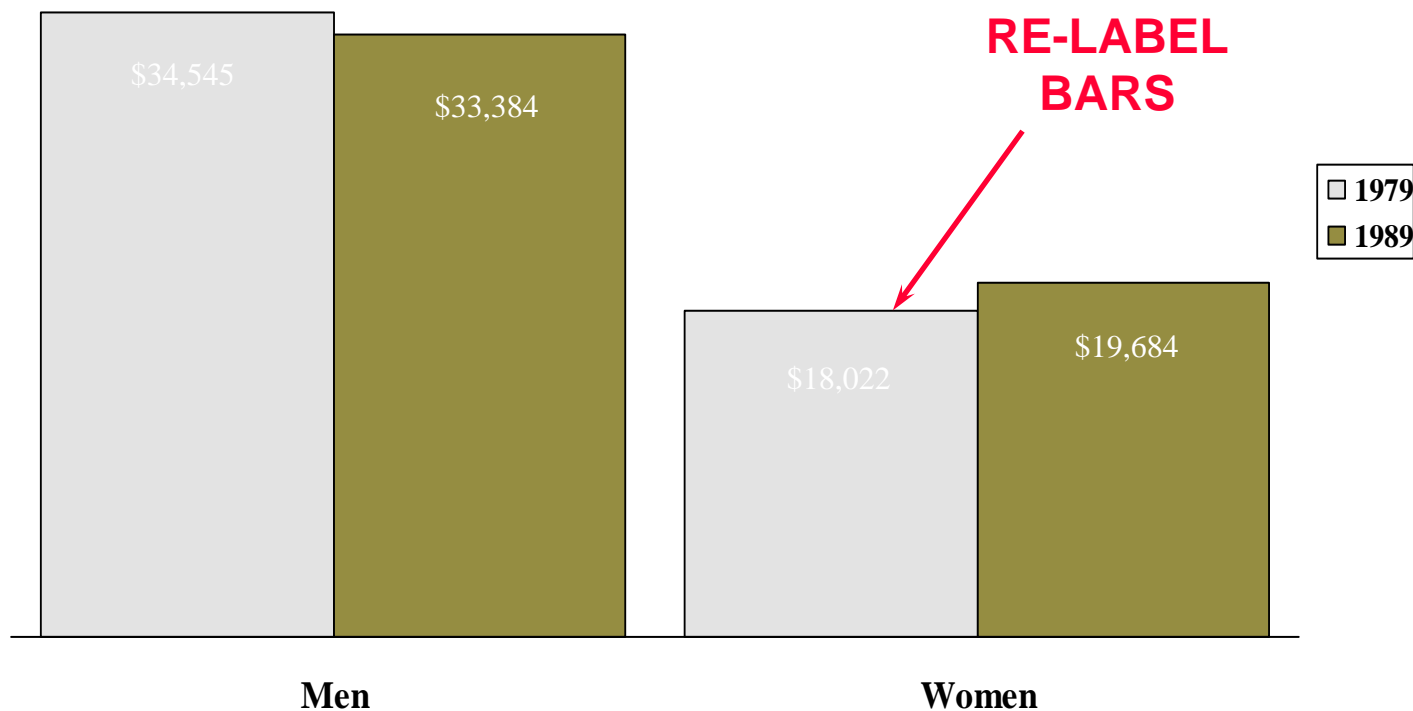


Figure VI-1 Average Annual Wages by Sex, 1979 & 1989

Men continued to earn higher incomes than women. . .

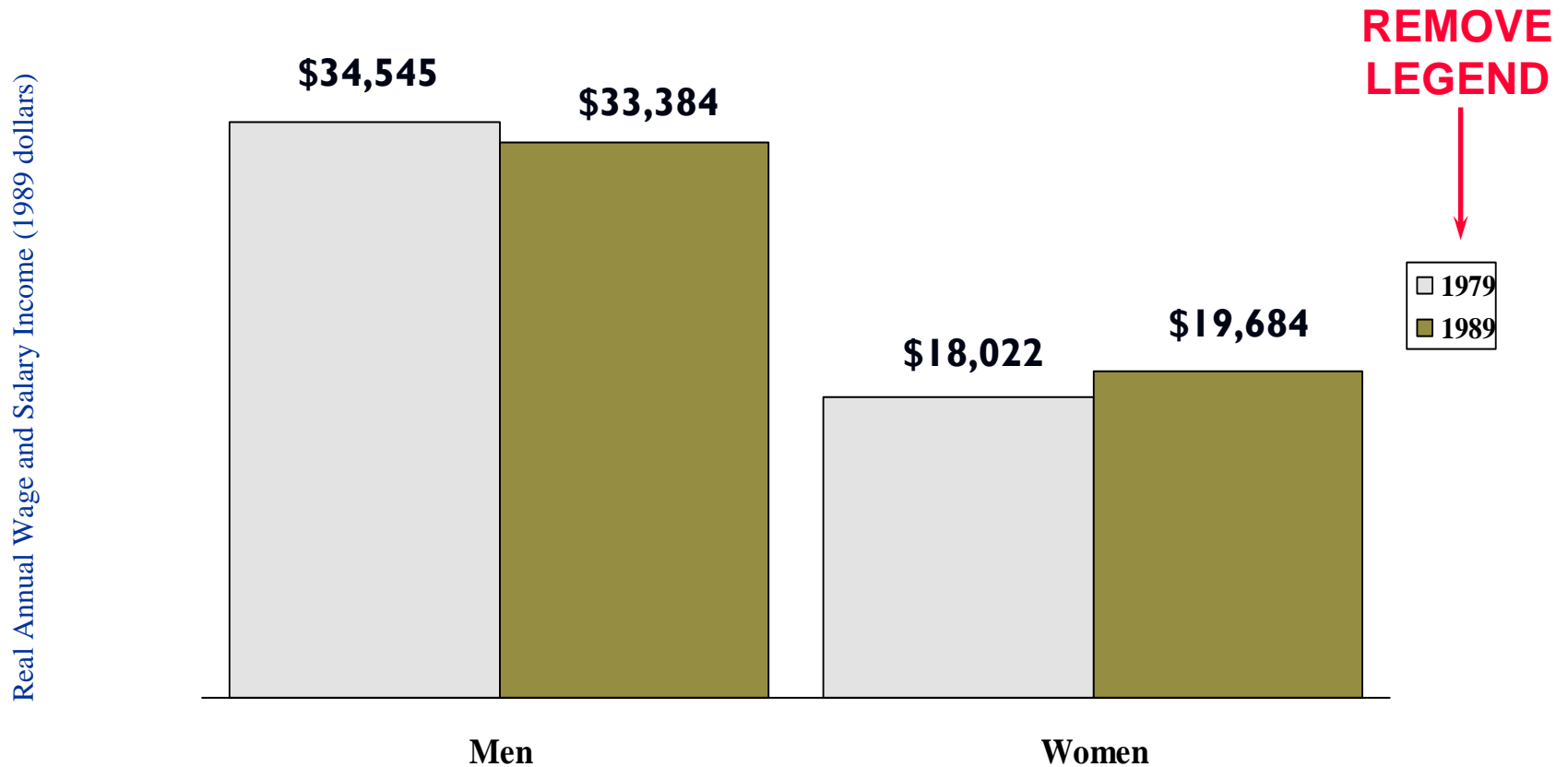


Figure VI-1 Average Annual Wages by Sex, 1979 & 1989

Men continued to earn higher incomes than women. . .

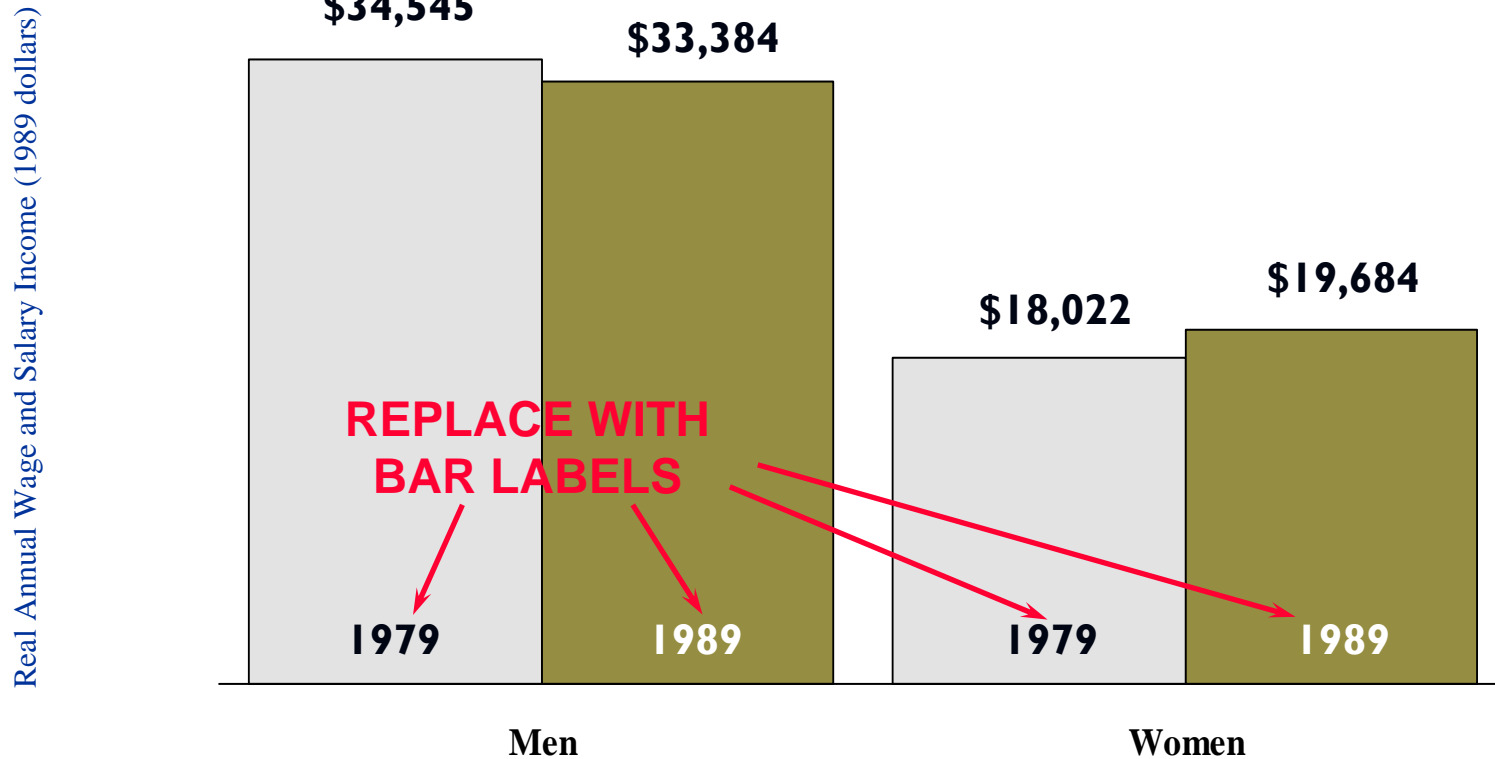


Figure VI-1 Average Annual Wages by Sex, 1979 & 1989

Men continued to earn higher incomes than women. . .

Real Annual Wage and Salary Income (1989 dollars)

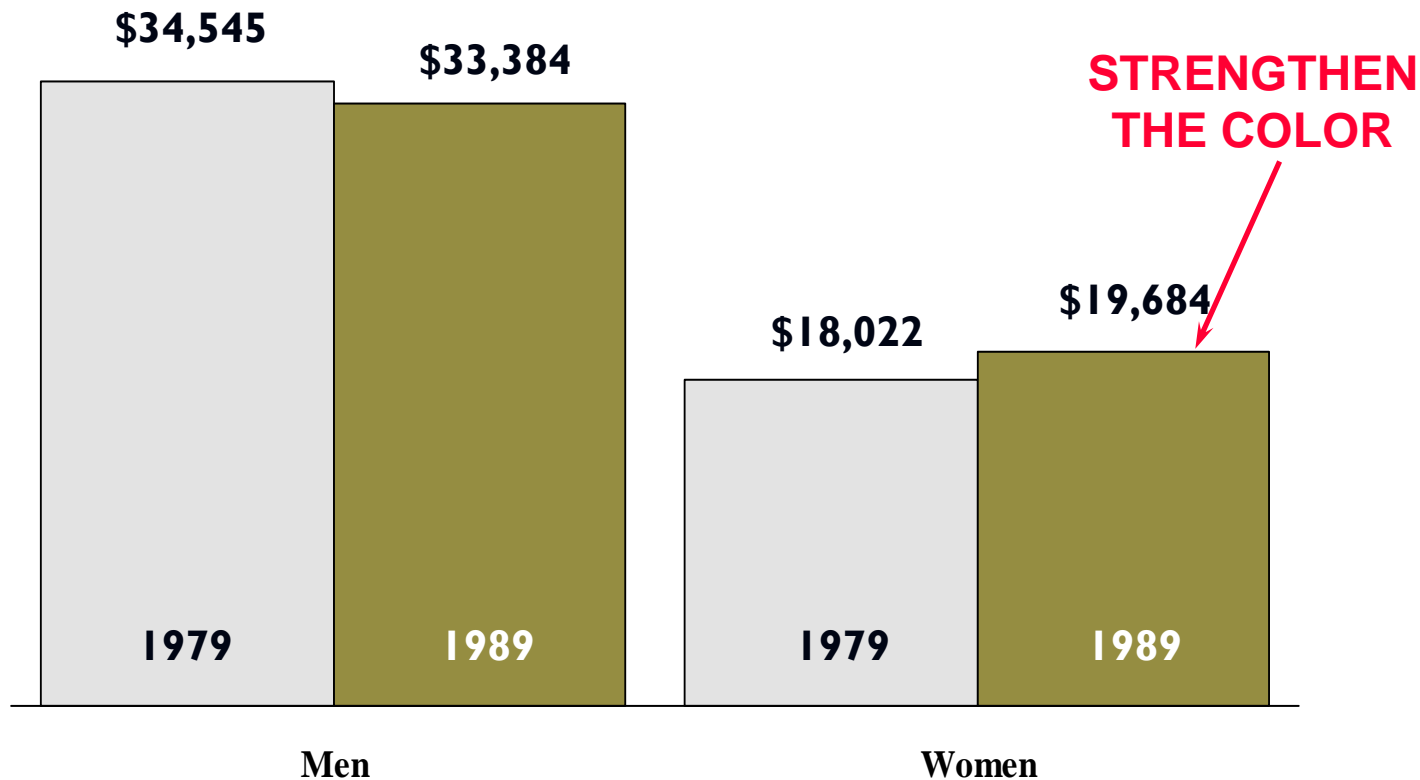
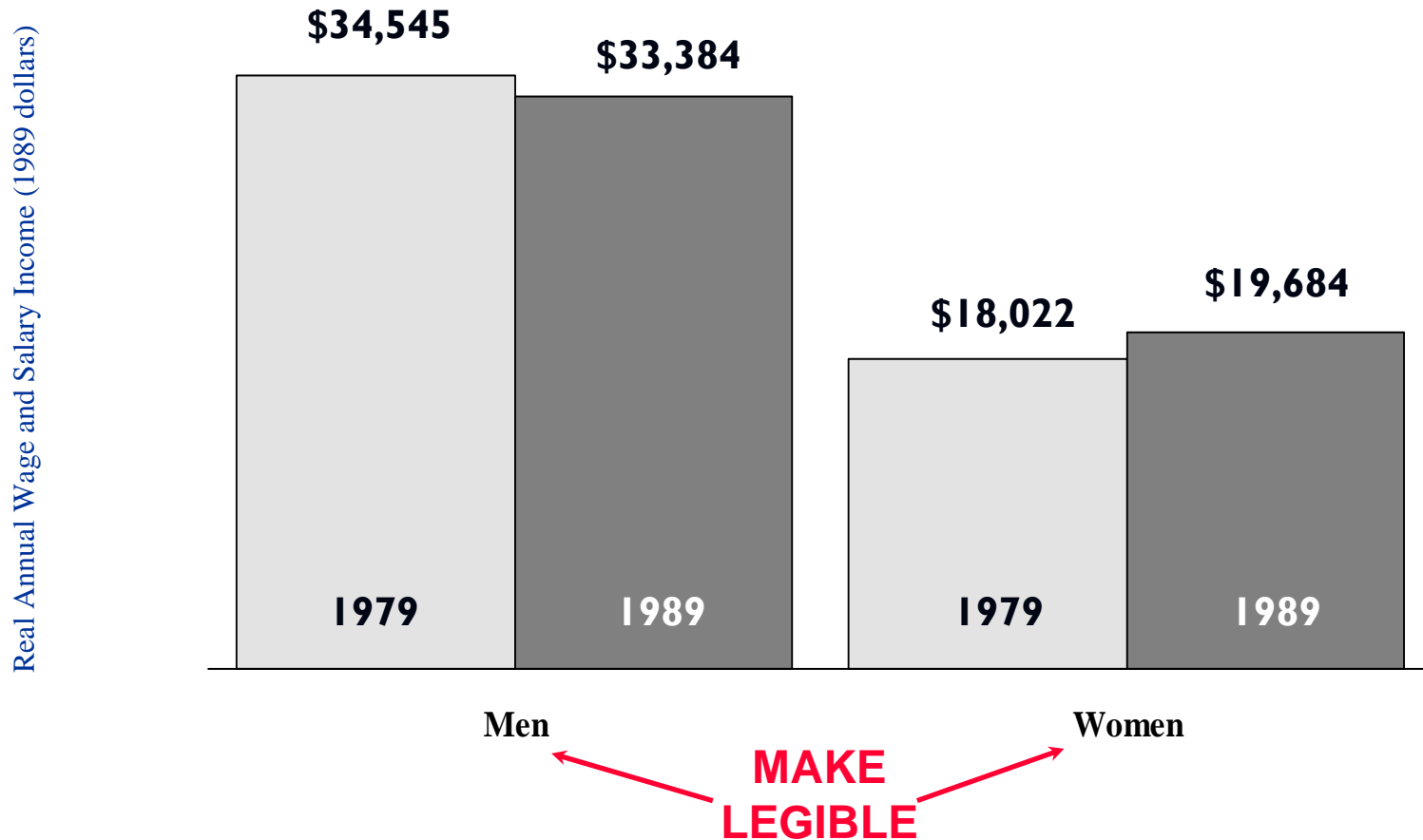


Figure VI-1 Average Annual Wages by Sex, 1979 & 1989

Men continued to earn higher incomes than women. . .



DECREASE EMPHASIS
ON REFERENCE

Figure VI-1

Average Annual Wages by Sex, 1979 & 1989

Men continued to earn higher incomes than women. . .

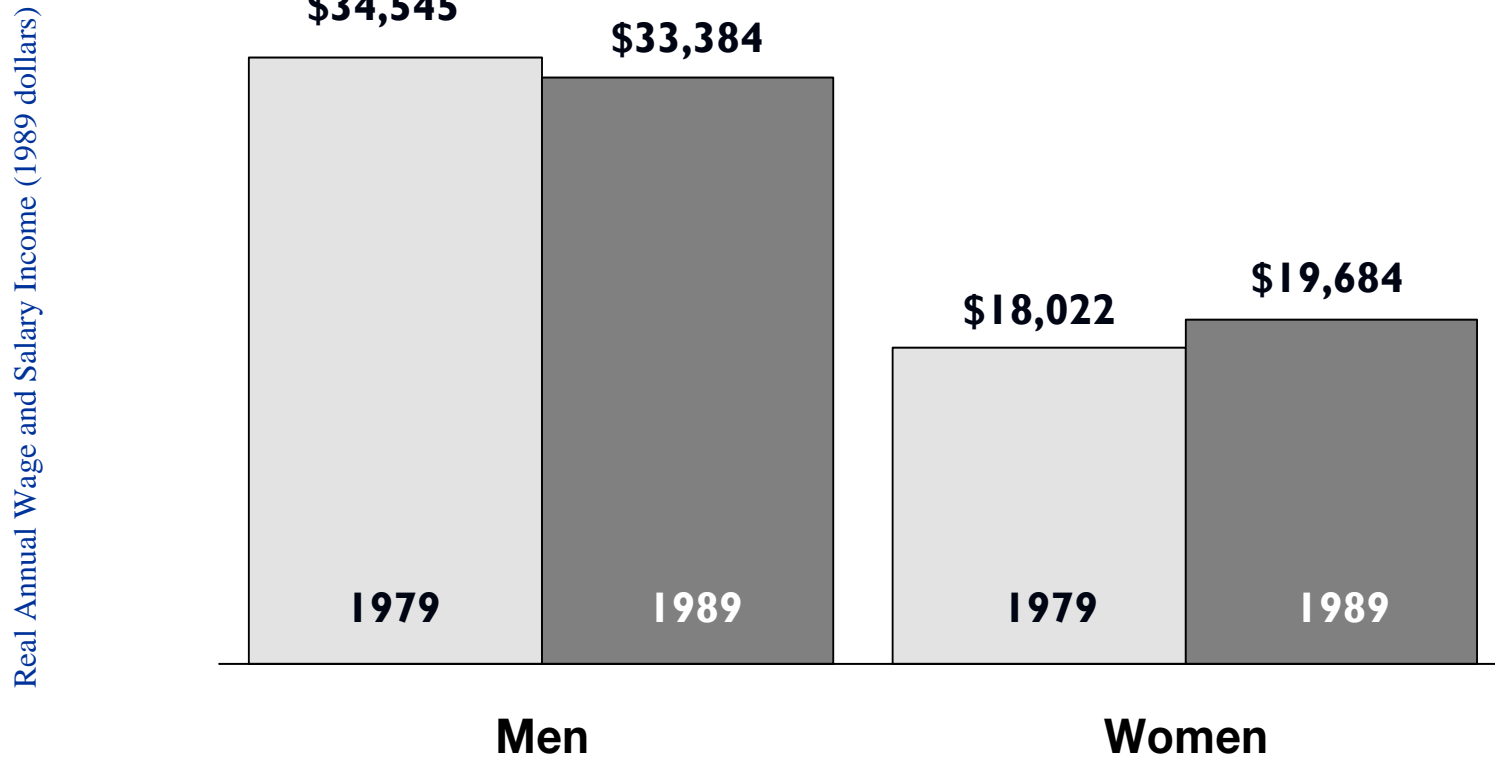


Figure VI-1

Average Annual Wages by Sex, 1979 & 1989

REWRITE

Men continued to earn higher incomes than women. . .

Real Annual Wage and Salary Income (1989 dollars)

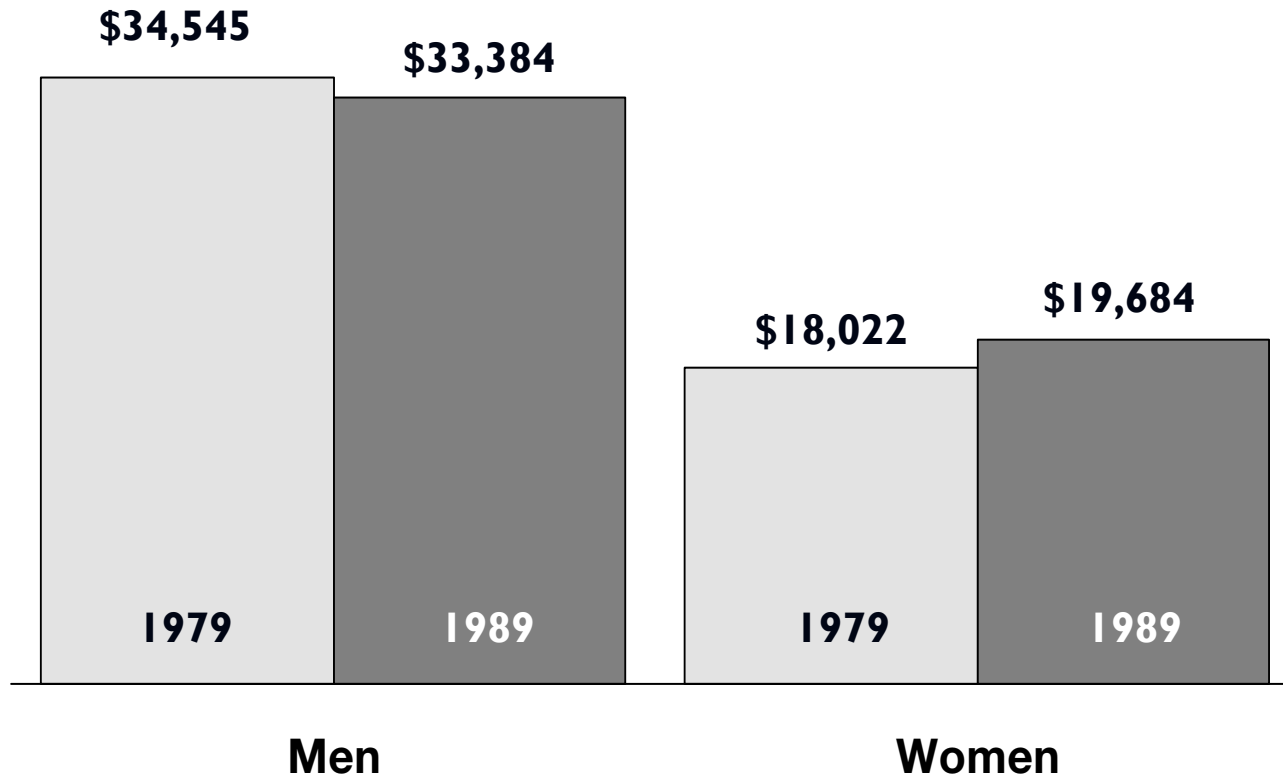


Figure VI-1

The Gap Between Male and Female Earnings is Decreasing But Men Still Earn More Than Women

DELETE → Men continued to earn higher incomes than women...

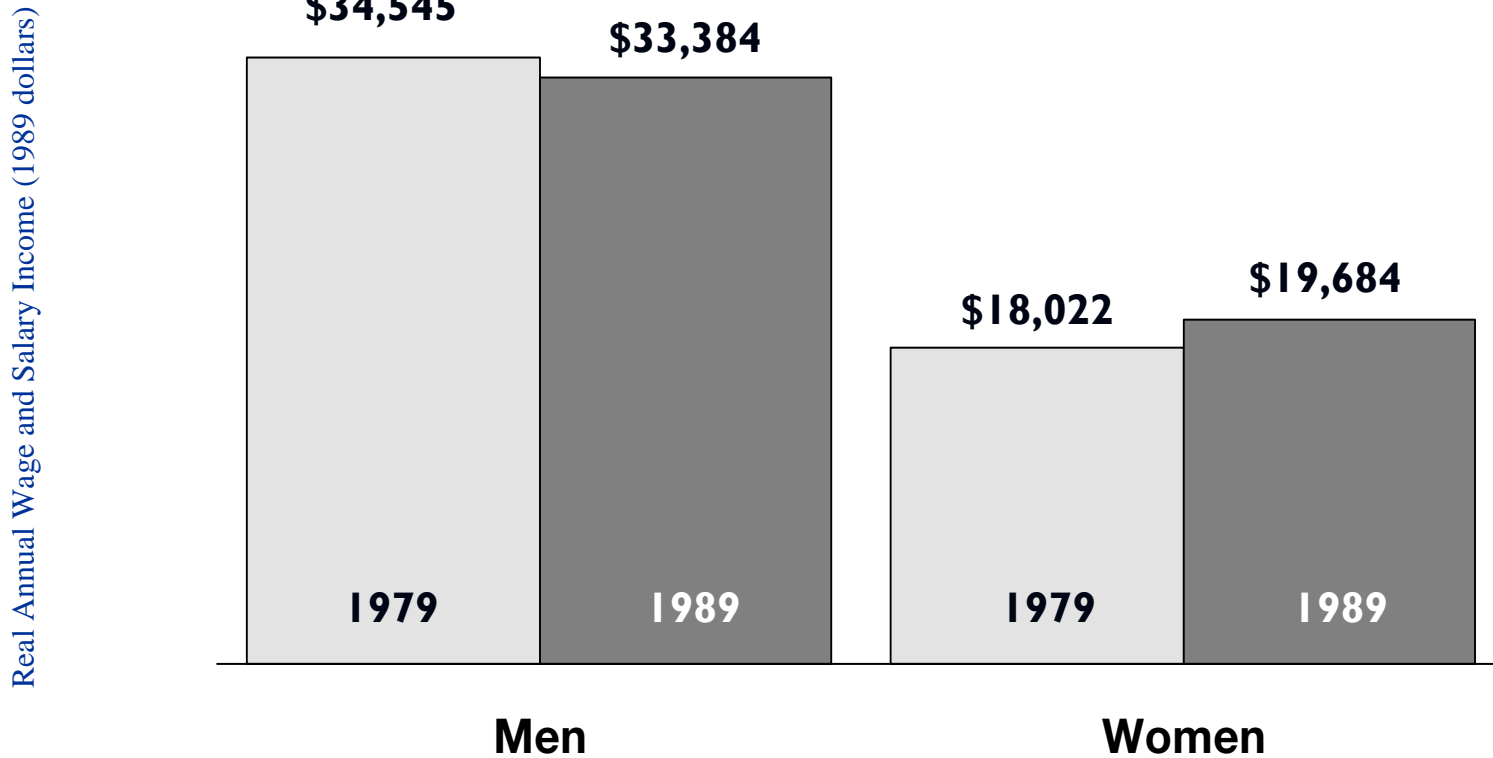


Figure VI-1

The Gap Between Male and Female Earnings is Decreasing But Men Still Earn More Than Women

**SHOW AS
FOOTNOTE**

Real Annual Wage and Salary Income (1989 dollars)

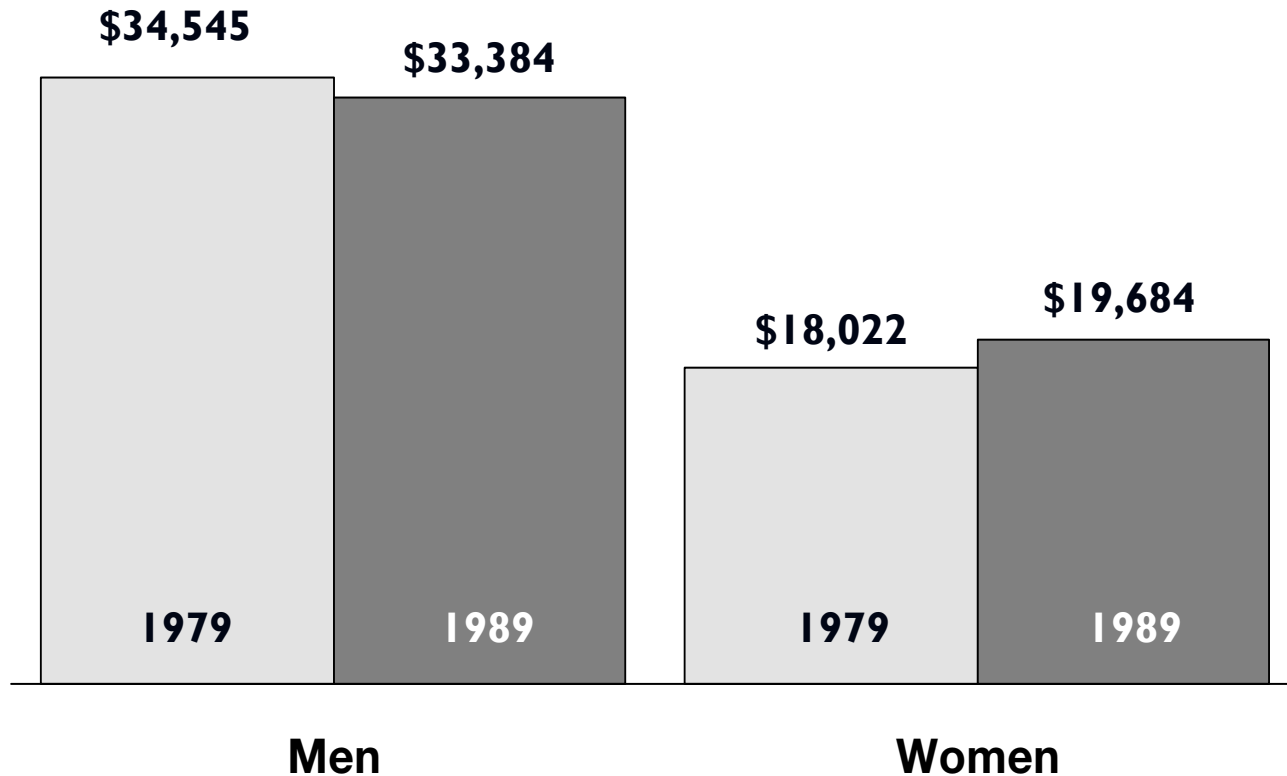
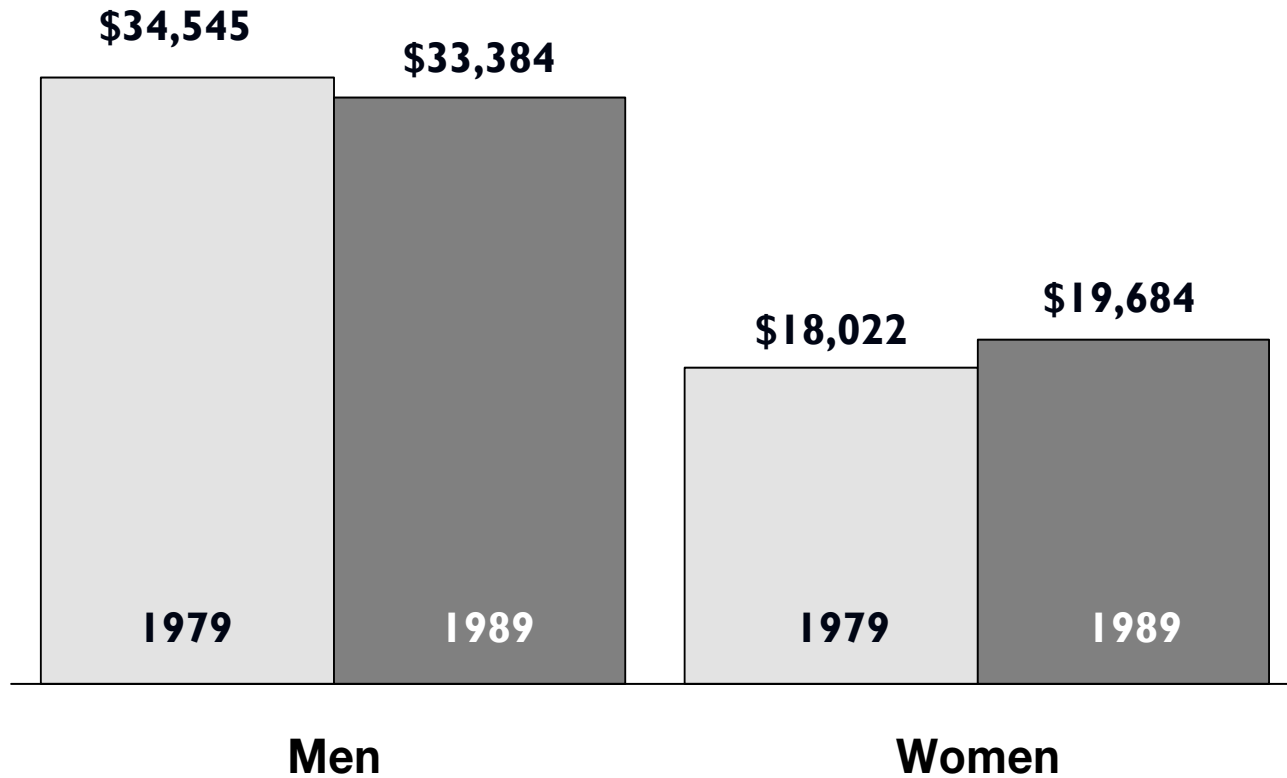


Figure VI-1

The Gap Between Male and Female Earnings is Decreasing But Men Still Earn More Than Women*

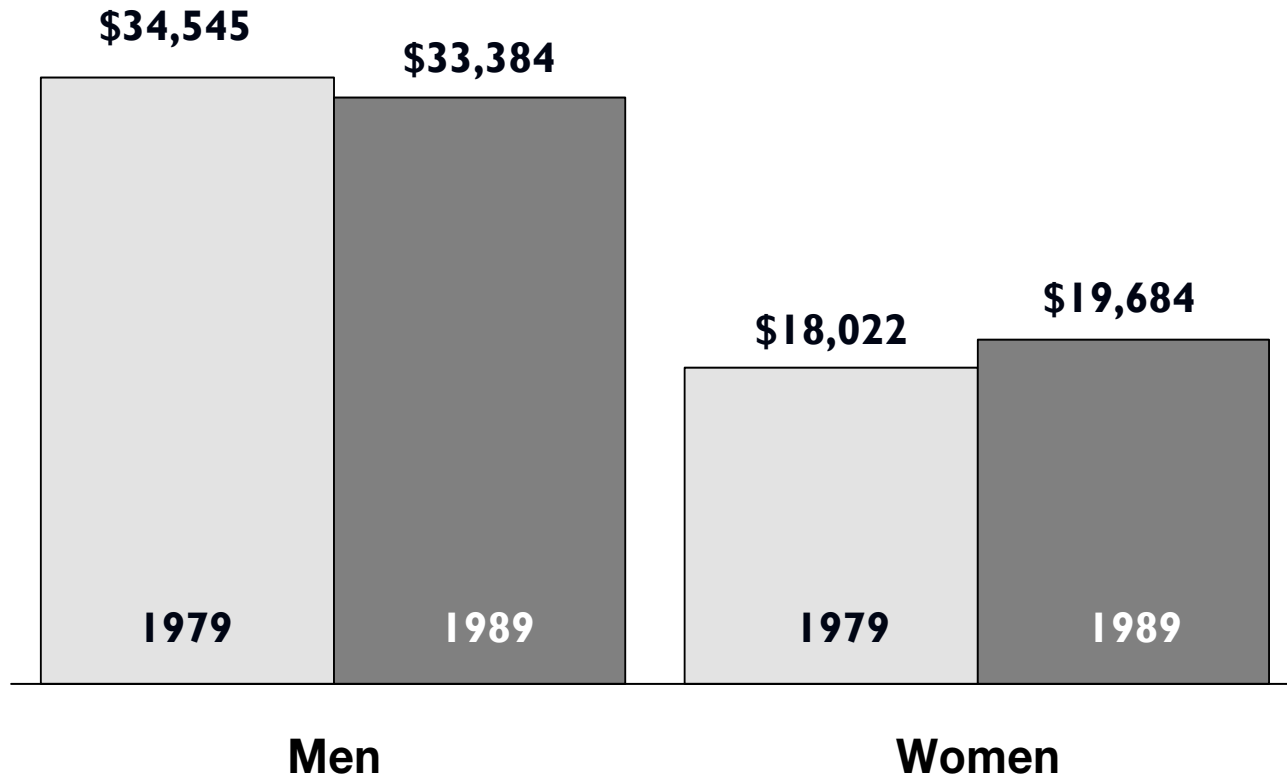


*Average annual income, 1989 dollars (real income)

← **ADD DATE, REFERENCE**

Figure VI-1

The Gap Between Male and Female Earnings is Decreasing But Men Still Earn More Than Women*



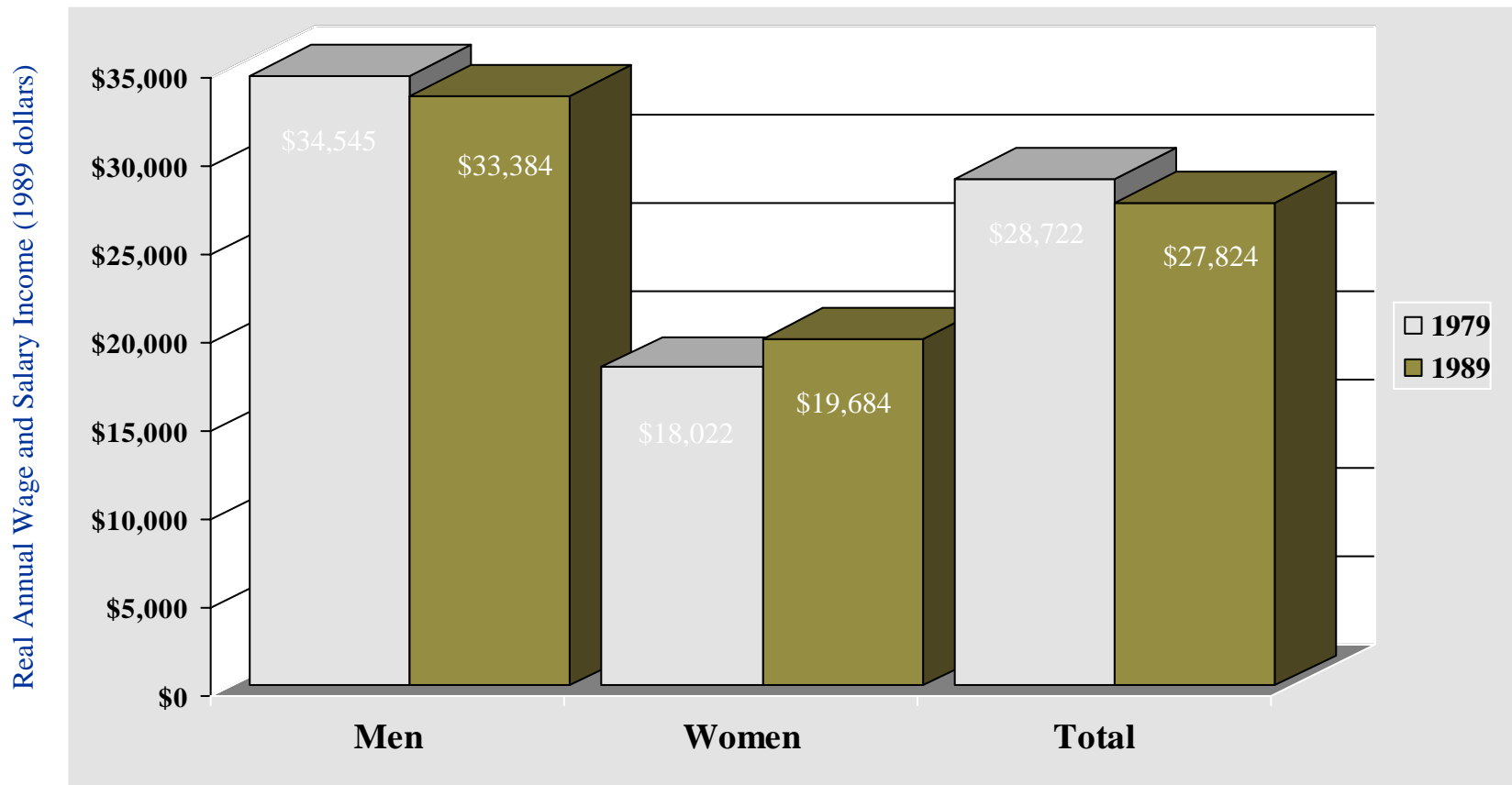
*Average annual income, 1989 dollars (real income)

Data Source: Office of Financial Management, June 1993

BEFORE

Figure VI-1 Average Annual Wages by Sex, 1979 & 1989

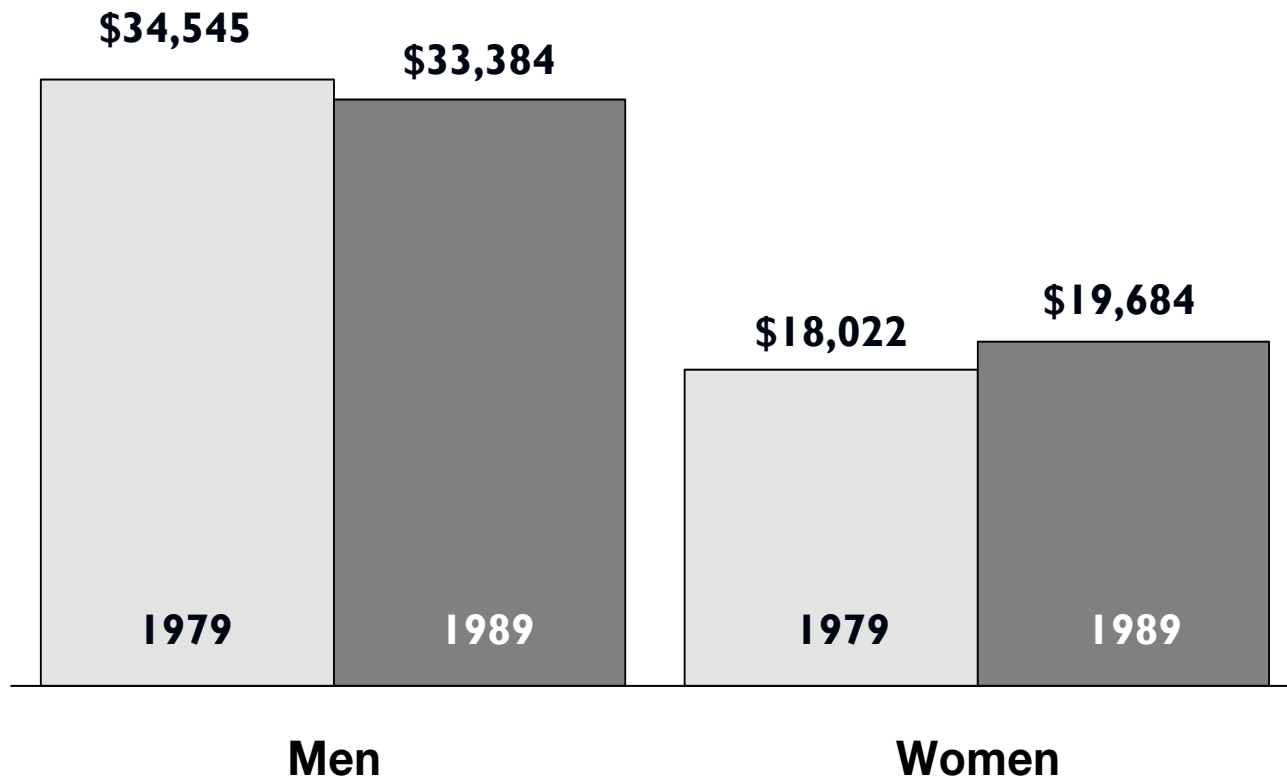
Men continued to earn higher incomes than women. . .



AFTER

Figure VI-1

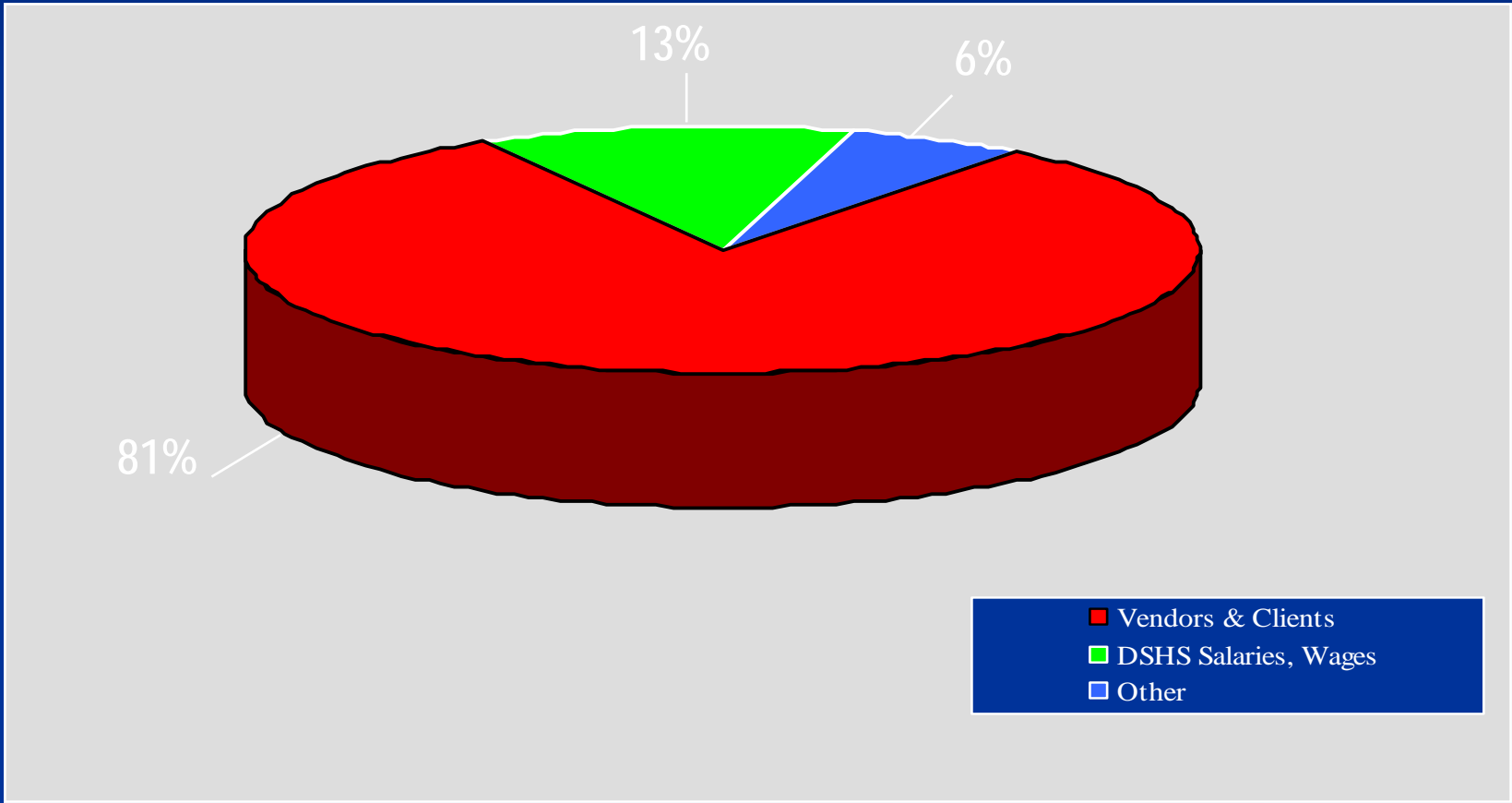
**The Gap Between Male and Female Earnings is Decreasing
But Men Still Earn More Than Women***



*Average annual income, 1989 dollars (real income)

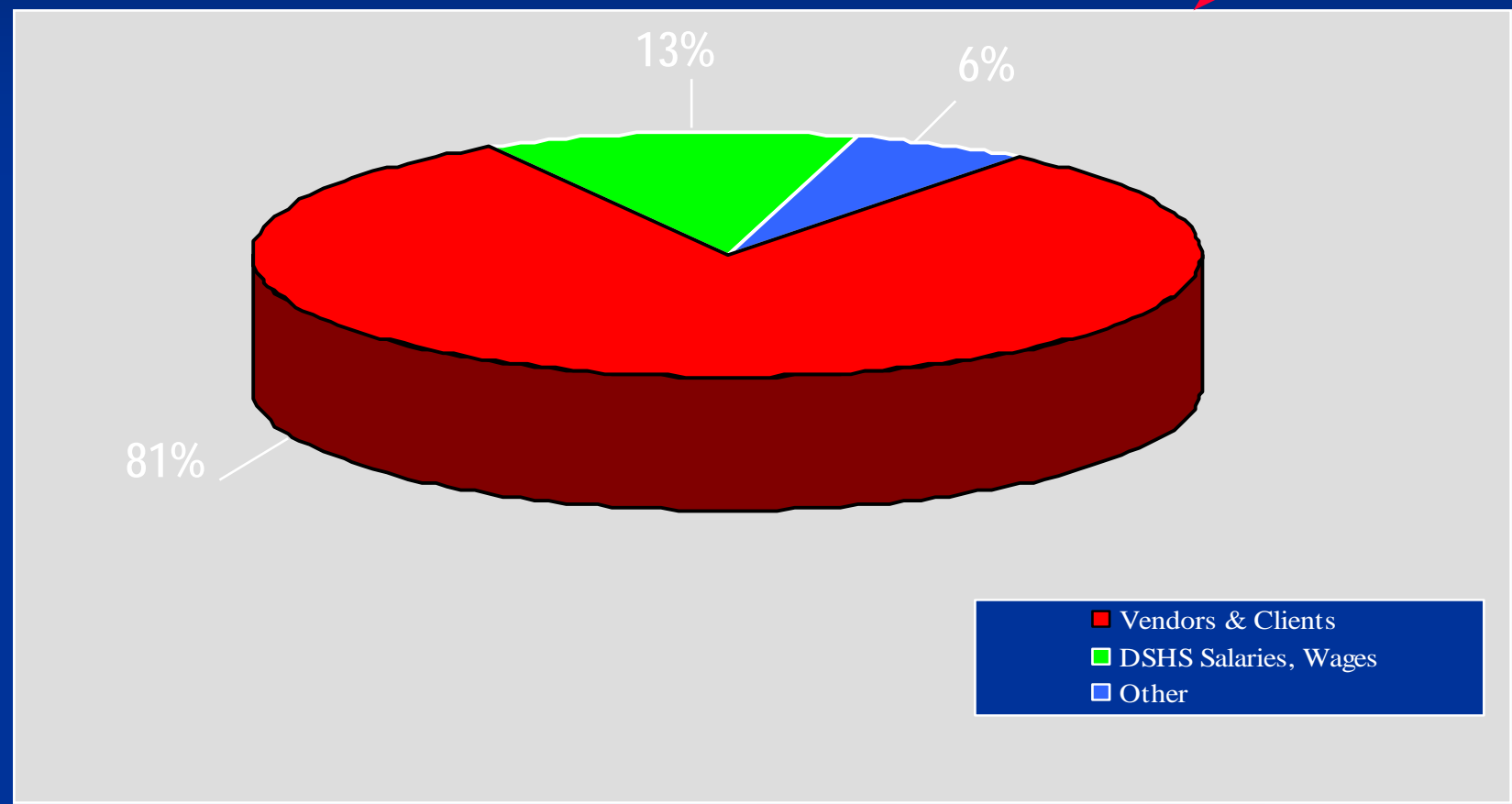
Data Source: Office of Financial Management, June 1993

DSHS Expenditures



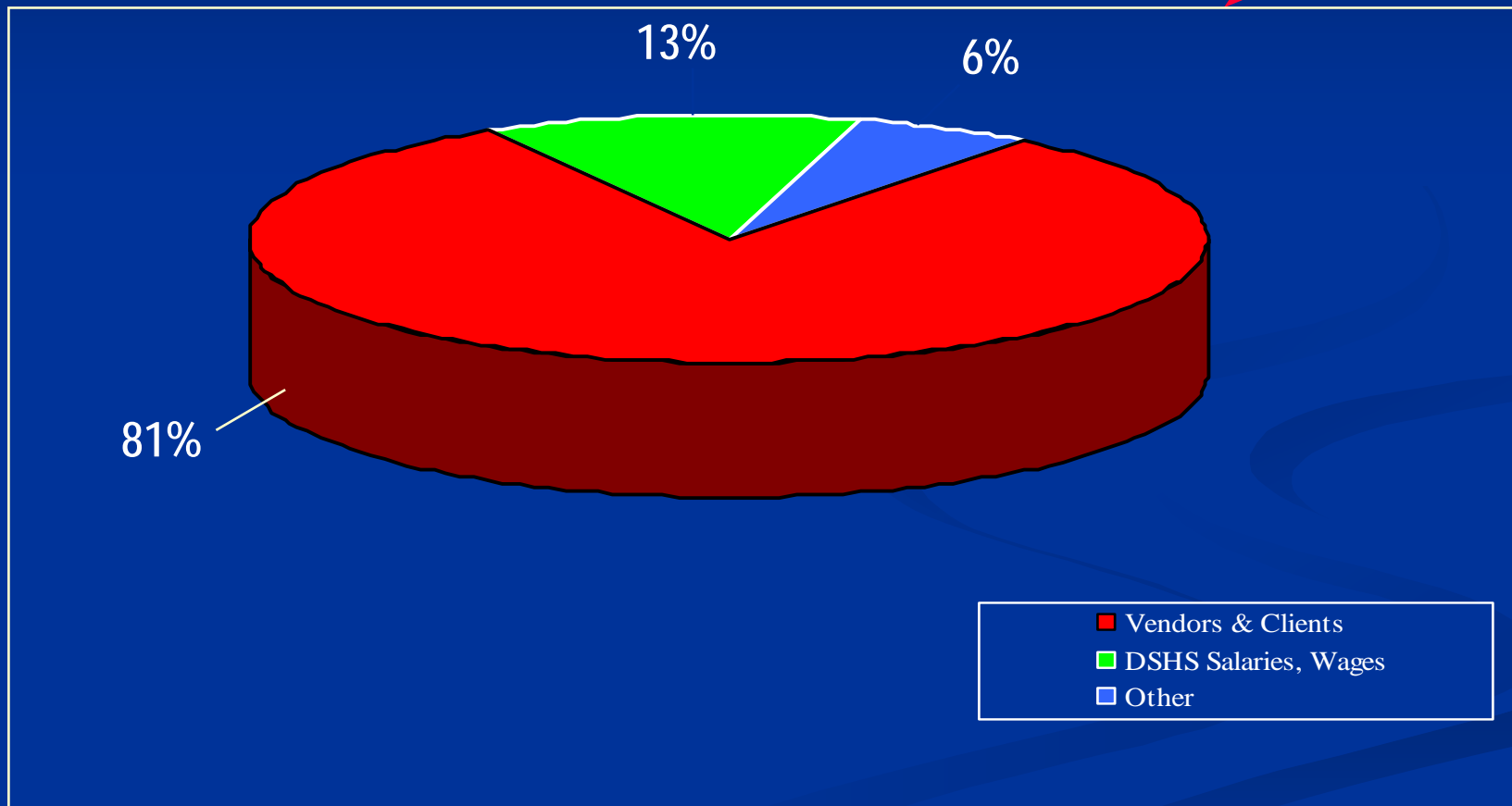
DSHS Expenditures

REMOVE
SHADING

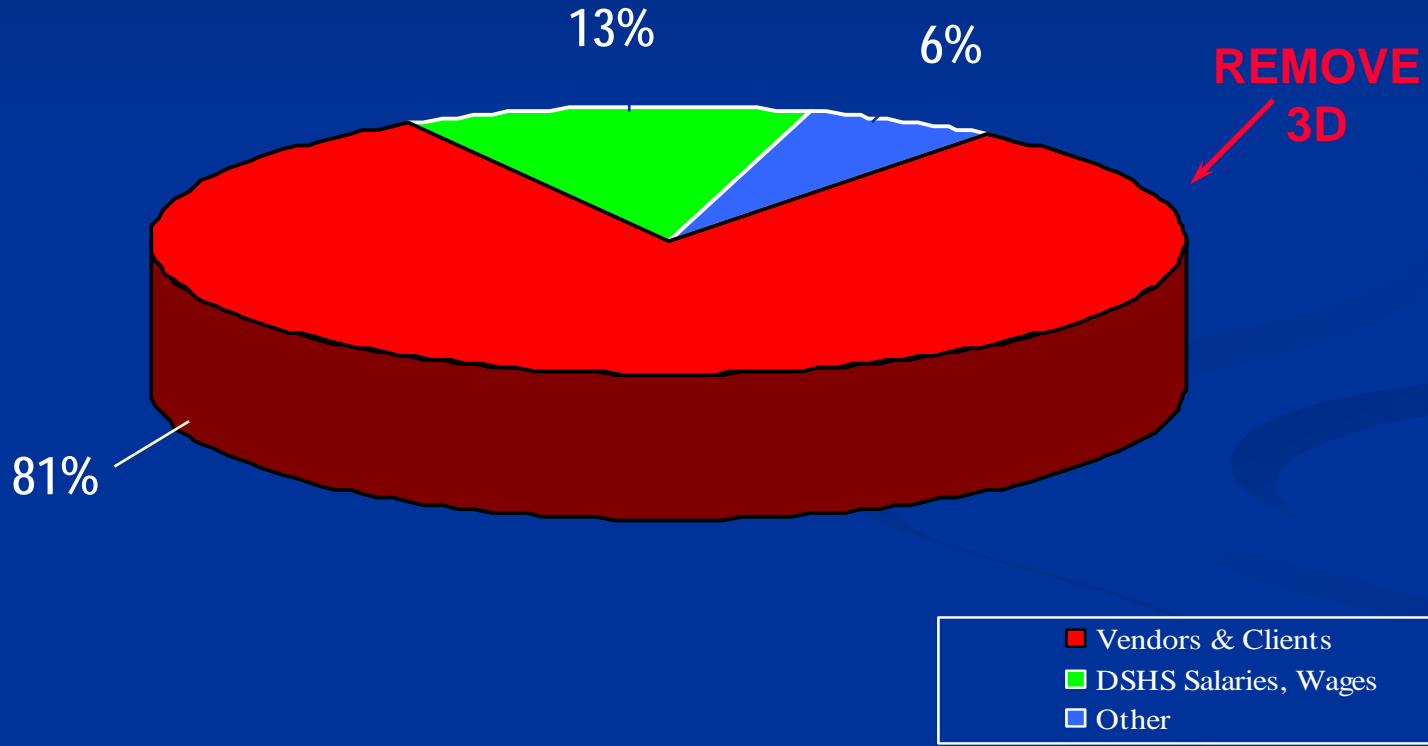


DSHS Expenditures

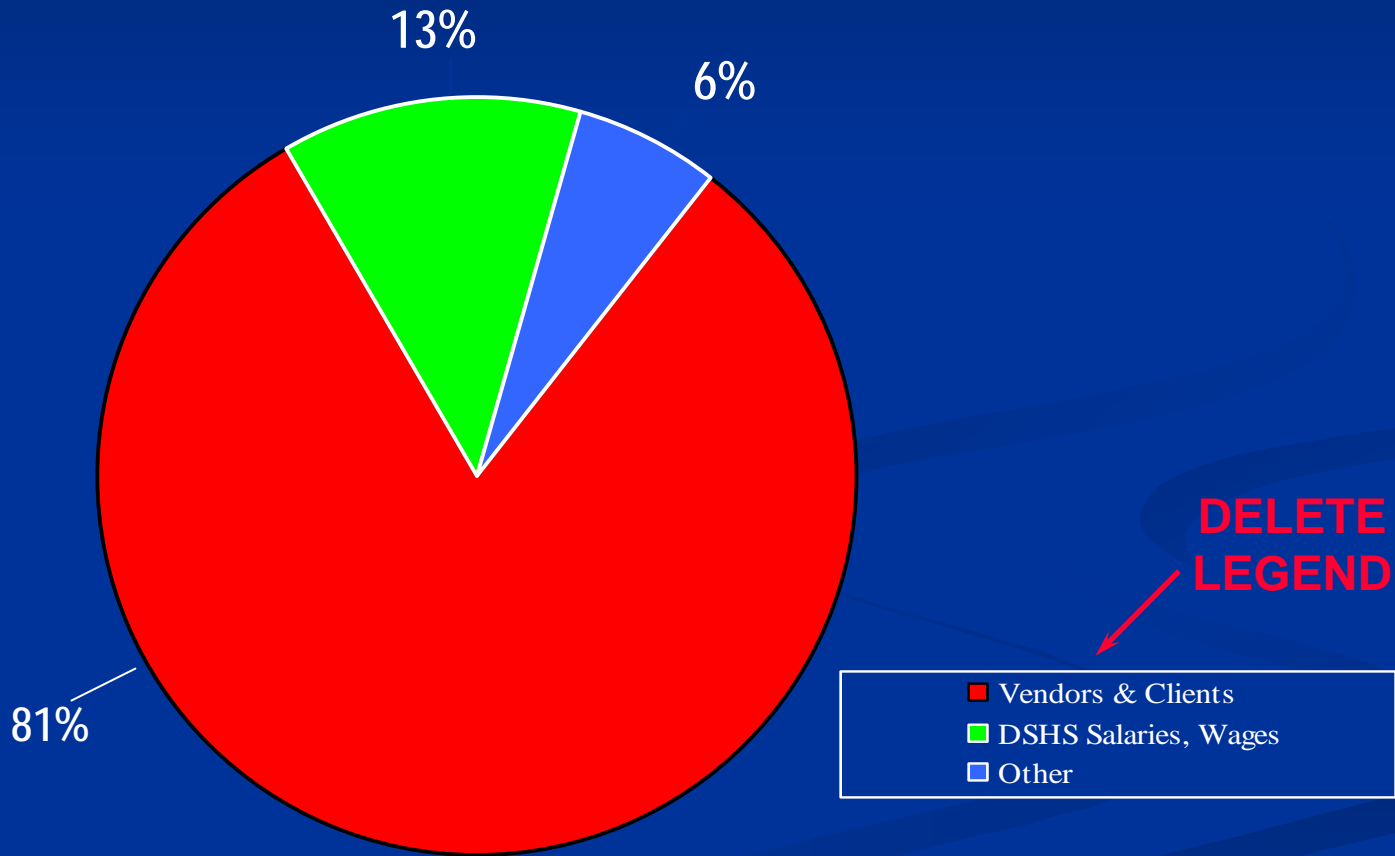
REMOVE
LINE



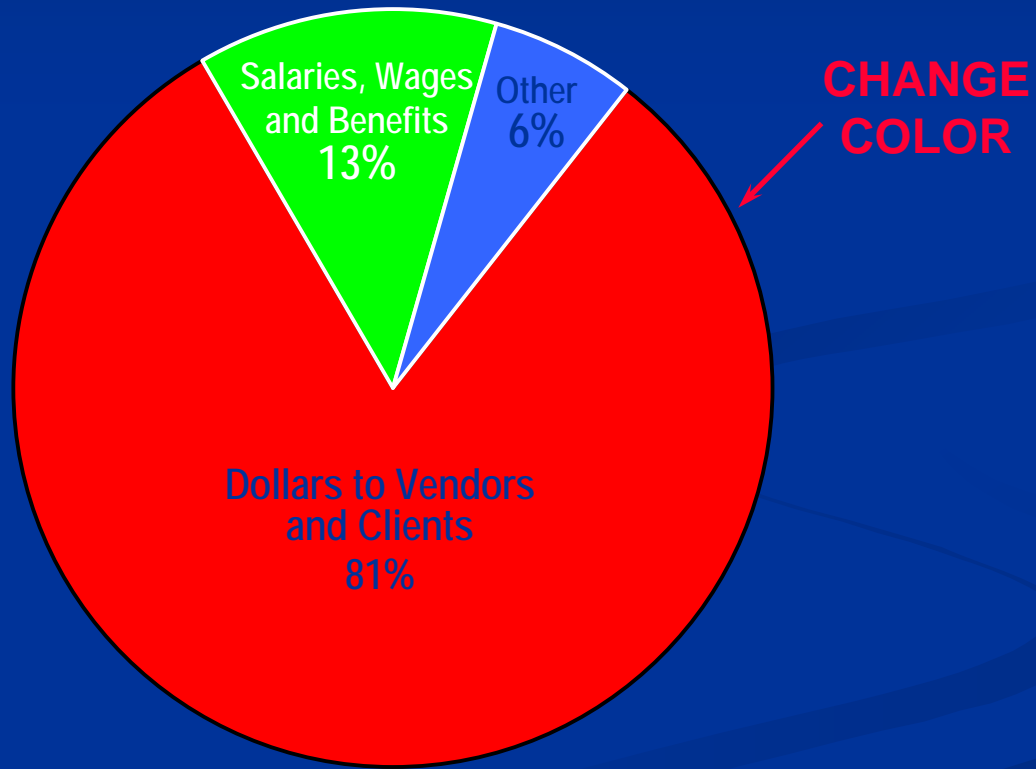
DSHS Expenditures



DSHS Expenditures

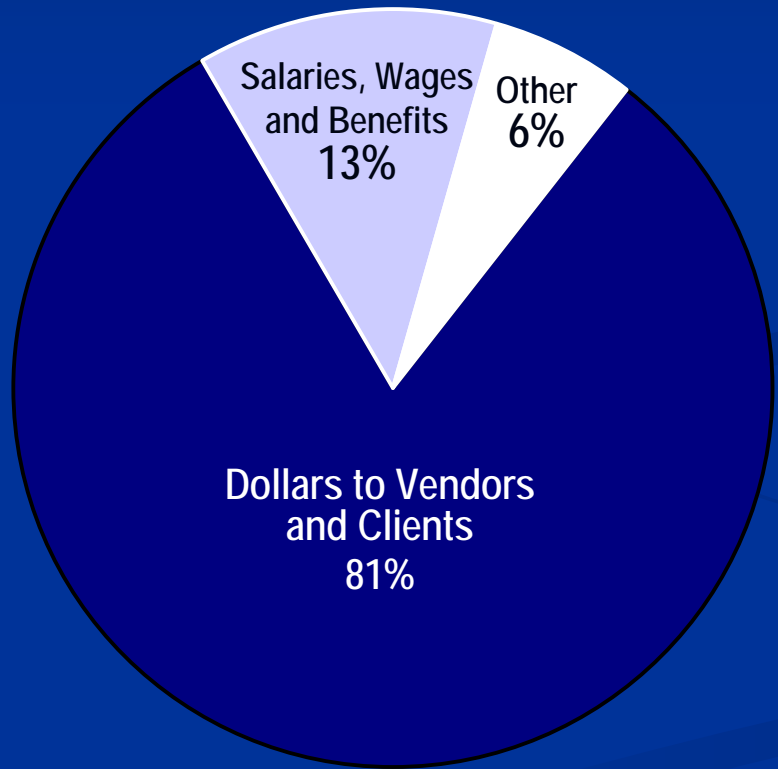


DSHS Expenditures

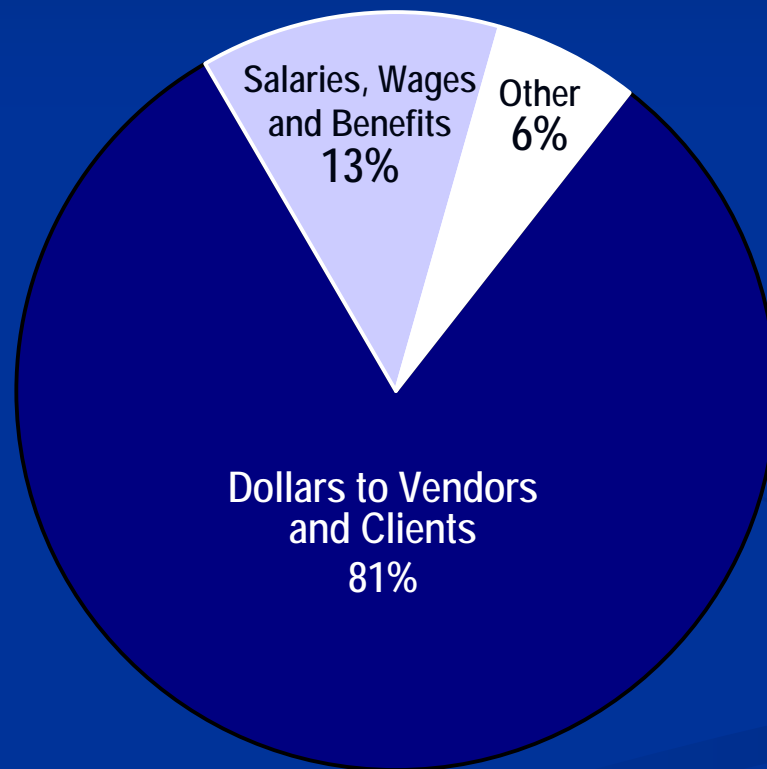


**REWRITE
TITLE** →

DSHS Expenditures

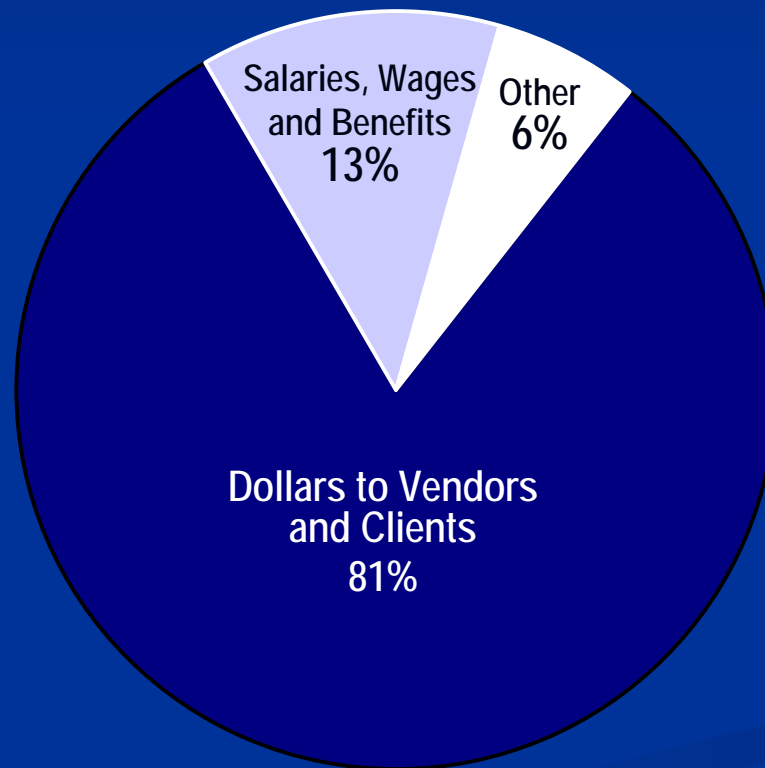


Our Spending Goes to Client Care



Our Spending Goes to Client Care

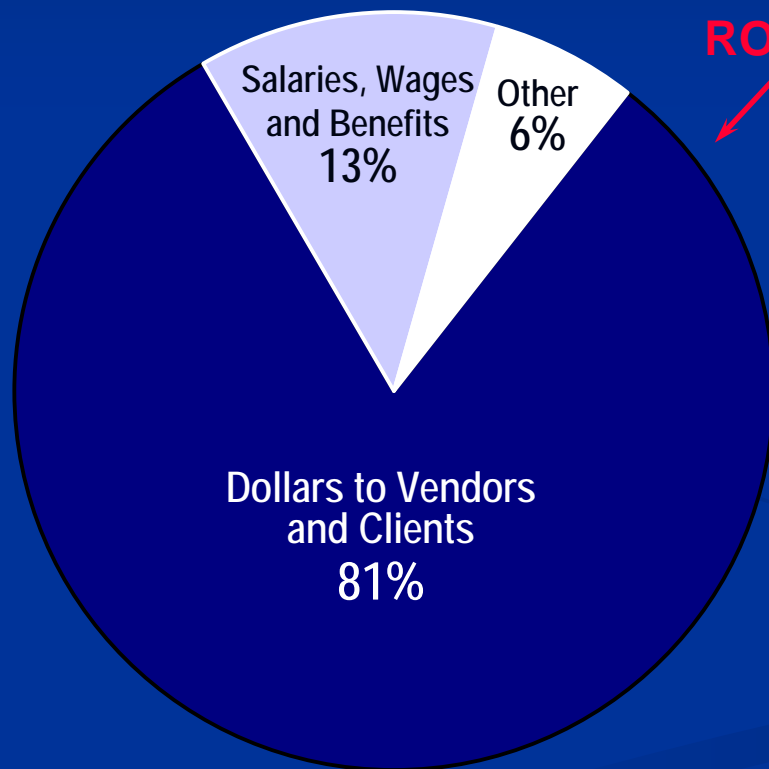
**ADD DOLLAR
AMOUNT** → DSHS 2001-03 Budget = \$14.1 Billion



Our Spending Goes to Client Care

**CHANGE
FONT**

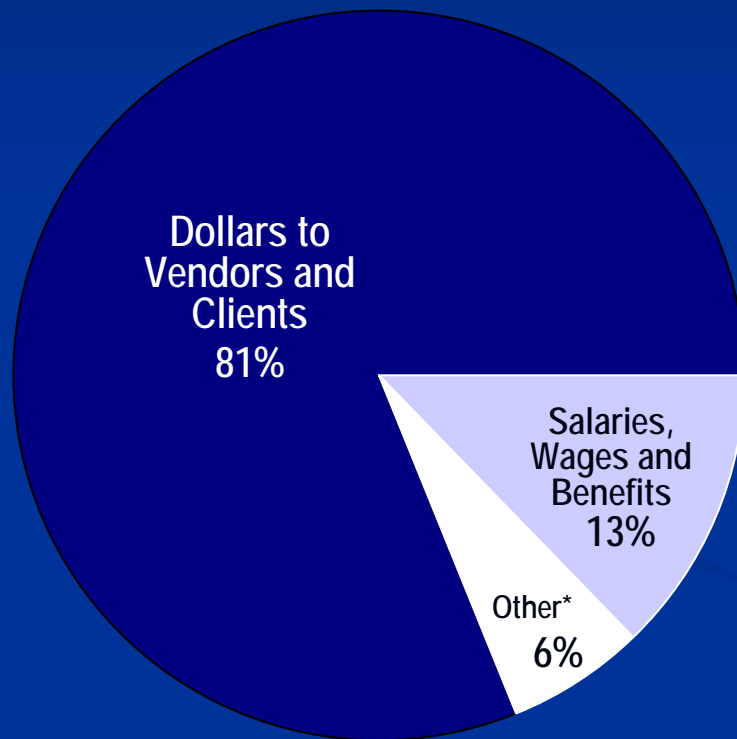
DSHS 2001-03 Budget = \$14.1 Billion



ROTATE

Our Spending Goes to Client Care

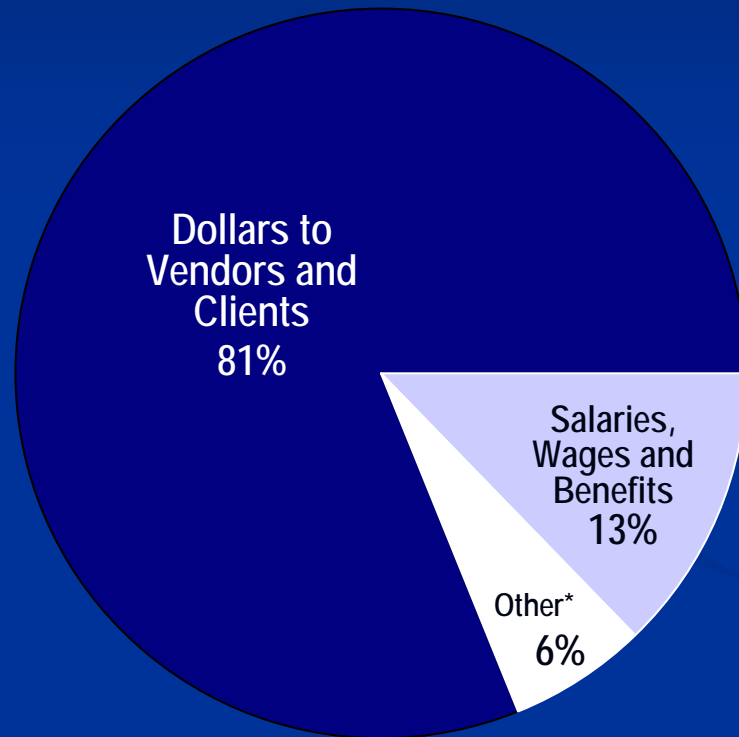
2001-03 DSHS Budget = \$14.1 billion



**COMPLETE
MESSAGE: Where do
we place our FTEs?**

Our Spending Goes to Client Care

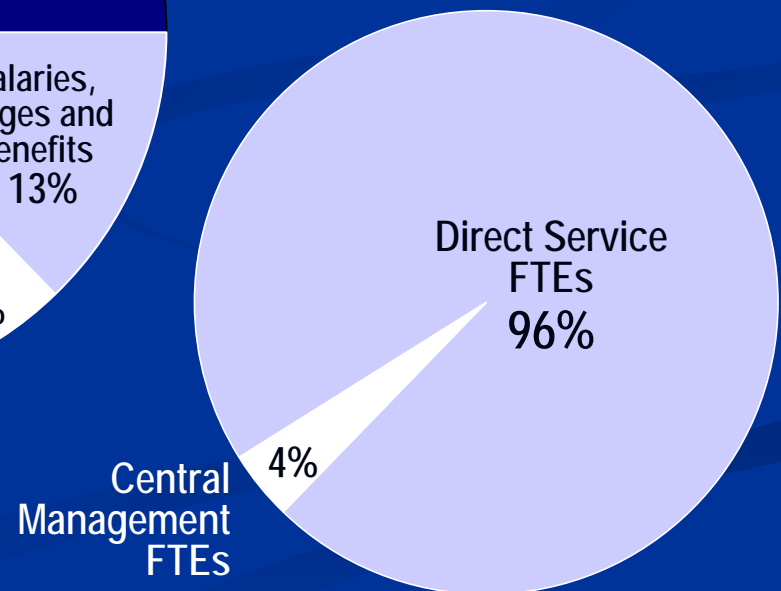
Proposed = \$14.1 billion



** All Other includes items such as leases, Attorney General services, agency contracts (other than direct vendor or client services), capital outlays, administrative hearings, support services, training, fraud prevention, administration of vendor contracts, and administration.*

Our Employees Serve Clients First

Proposed = 18,201 FTEs



BUDGET SUMMARY

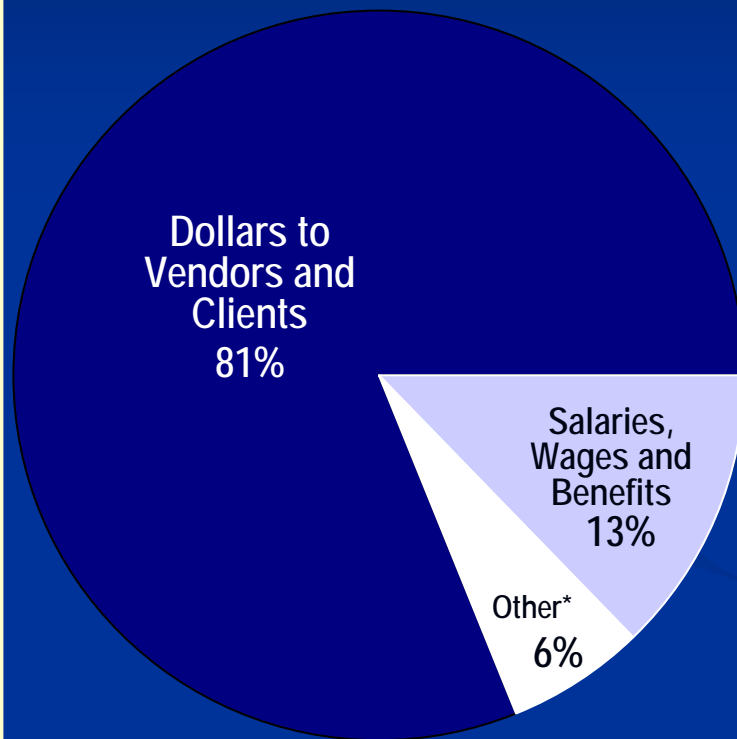
Focused and
Efficient

2001-03 Proposed
Budget
\$14.1 Billion
(All Funds)

** All Other includes items such as leases, Attorney General services, agency contracts (other than direct vendor or client services), capital outlays, administrative hearings, support services, training, fraud prevention, administration of vendor contracts, and administration.*

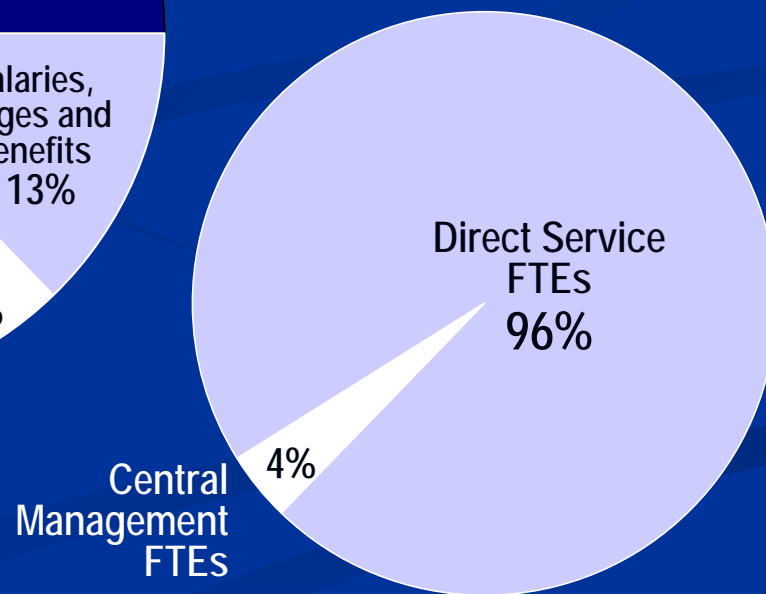
Our Spending Goes to Client Care

Proposed = \$14.1 billion



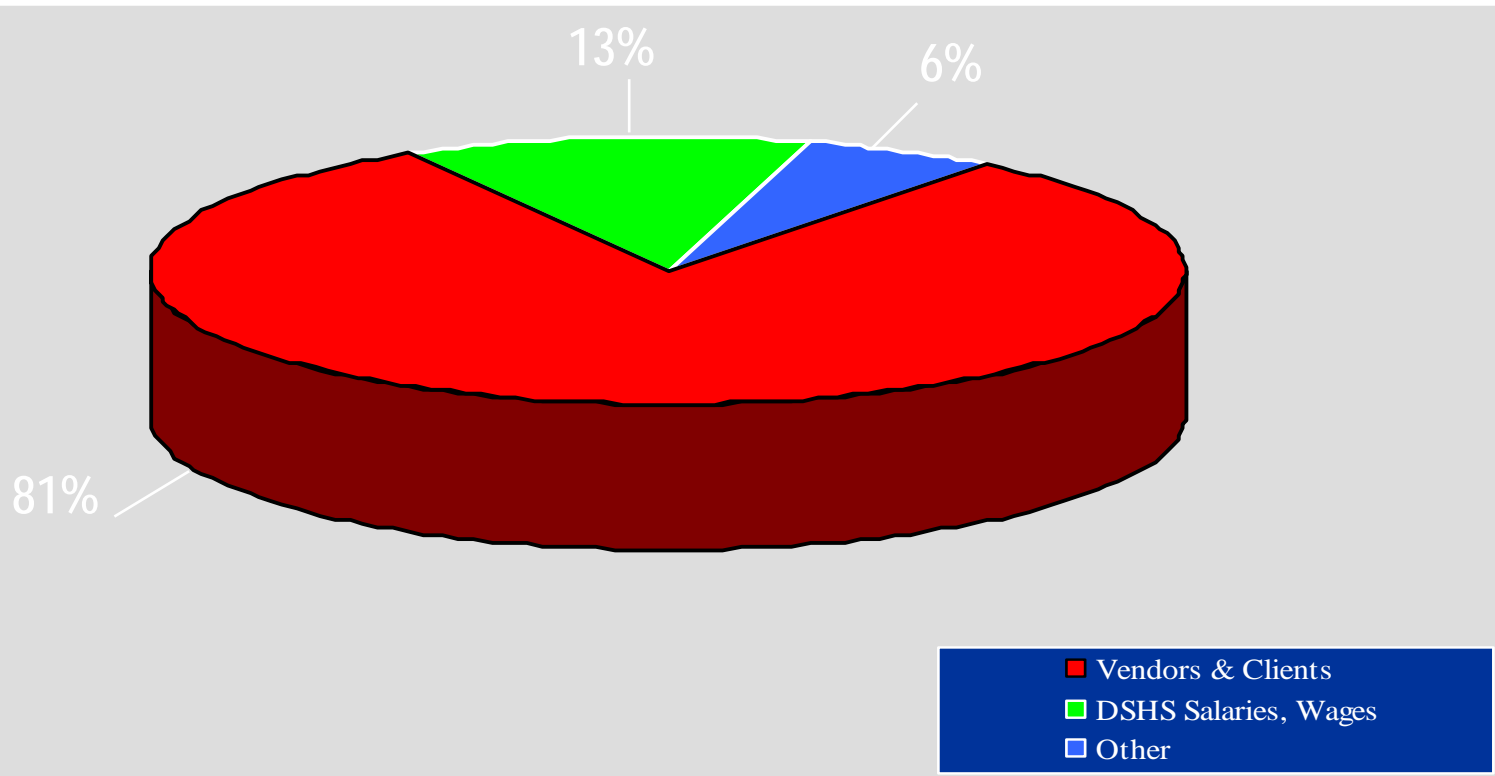
Our Employees Serve Clients First

Proposed = 18,201 FTEs



BEFORE

DSHS Expenditures



AFTER

BUDGET SUMMARY

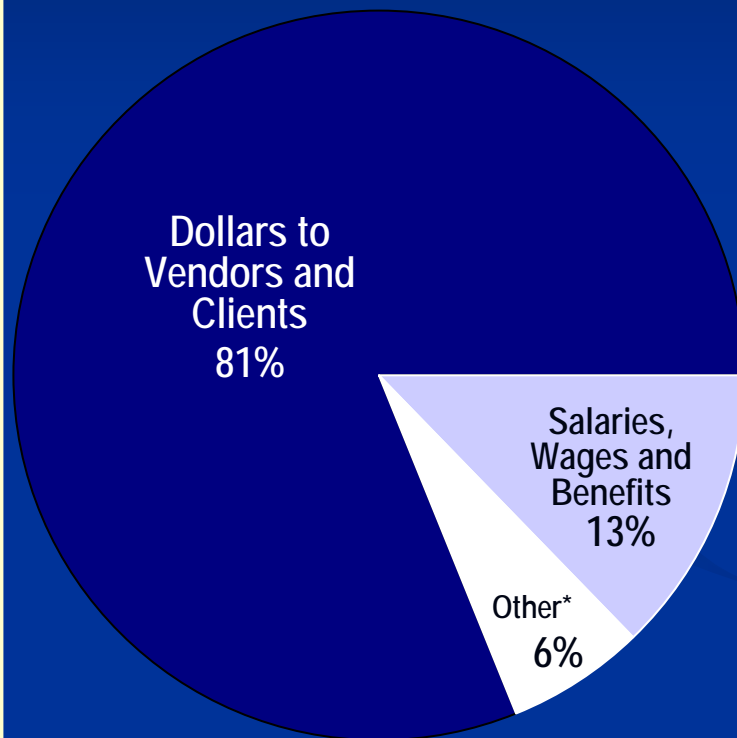
Focused and Efficient

2001-03 Proposed Budget
\$14.1 Billion
(All Funds)

** All Other includes items such as leases, Attorney General services, agency contracts (other than direct vendor or client services), capital outlays, administrative hearings, support services, training, fraud prevention, administration of vendor contracts, and administration.*

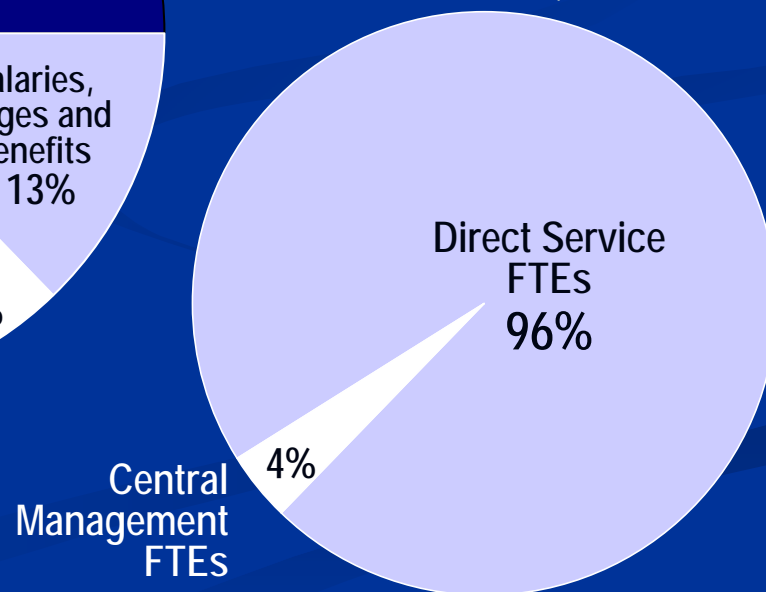
Our Spending Goes to Client Care

Proposed = \$14.1 billion

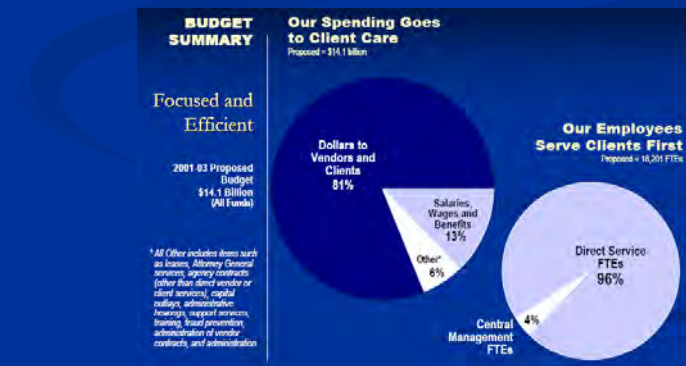
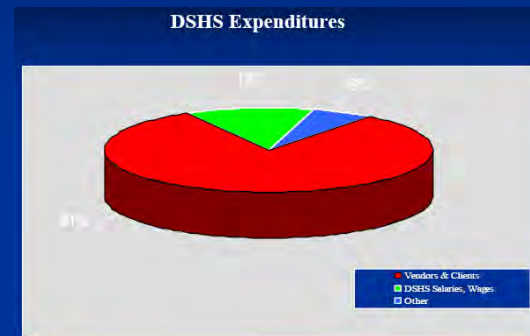
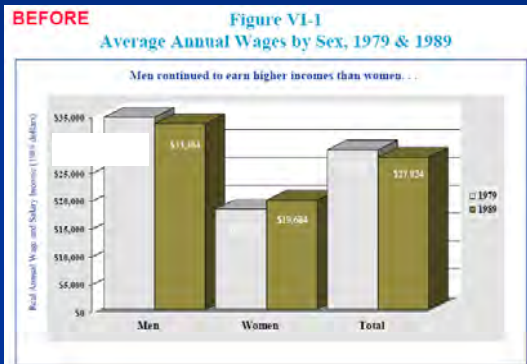


Our Employees Serve Clients First

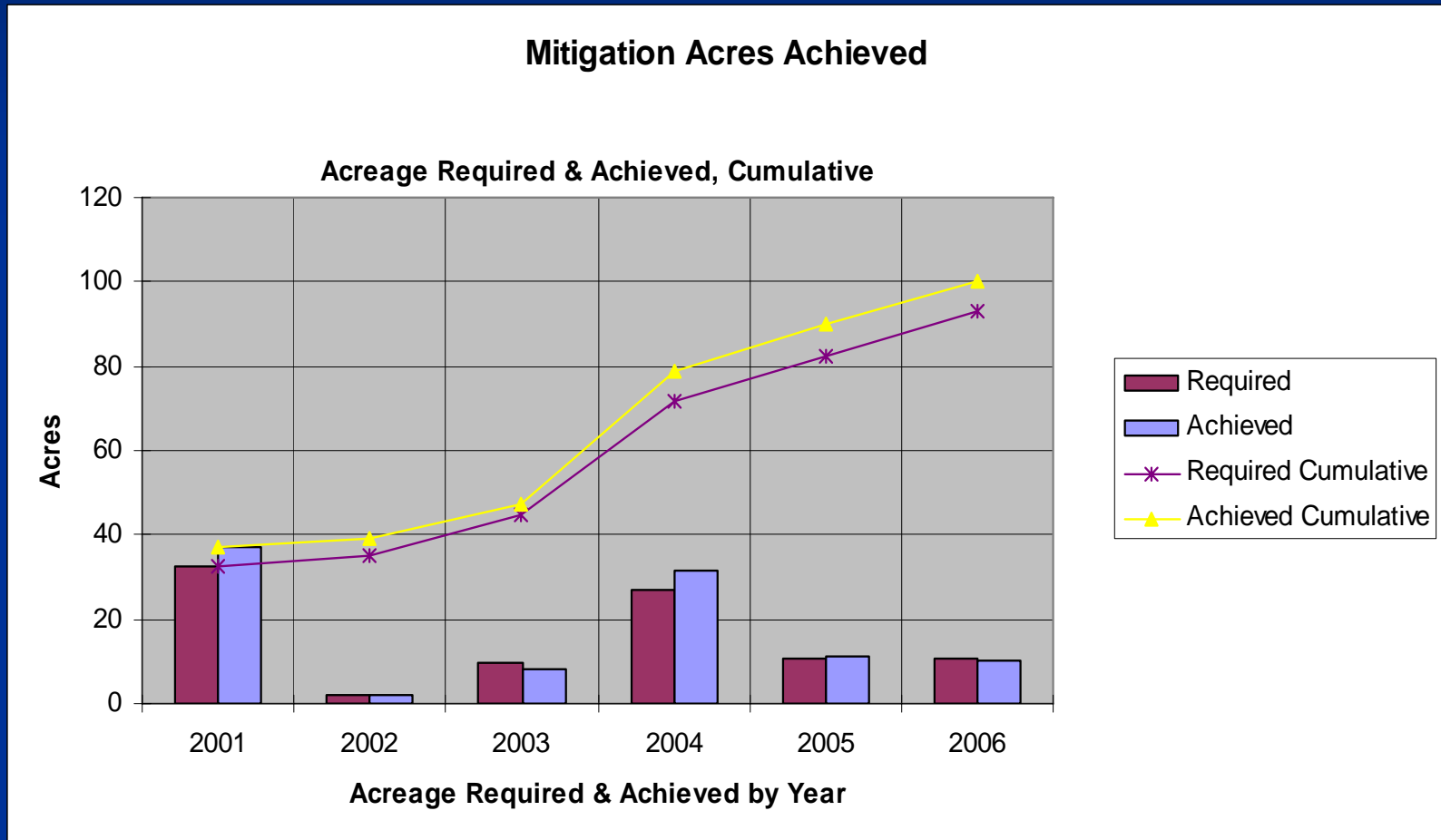
Proposed = 18,201 FTEs



Applying What You Have Just Learned

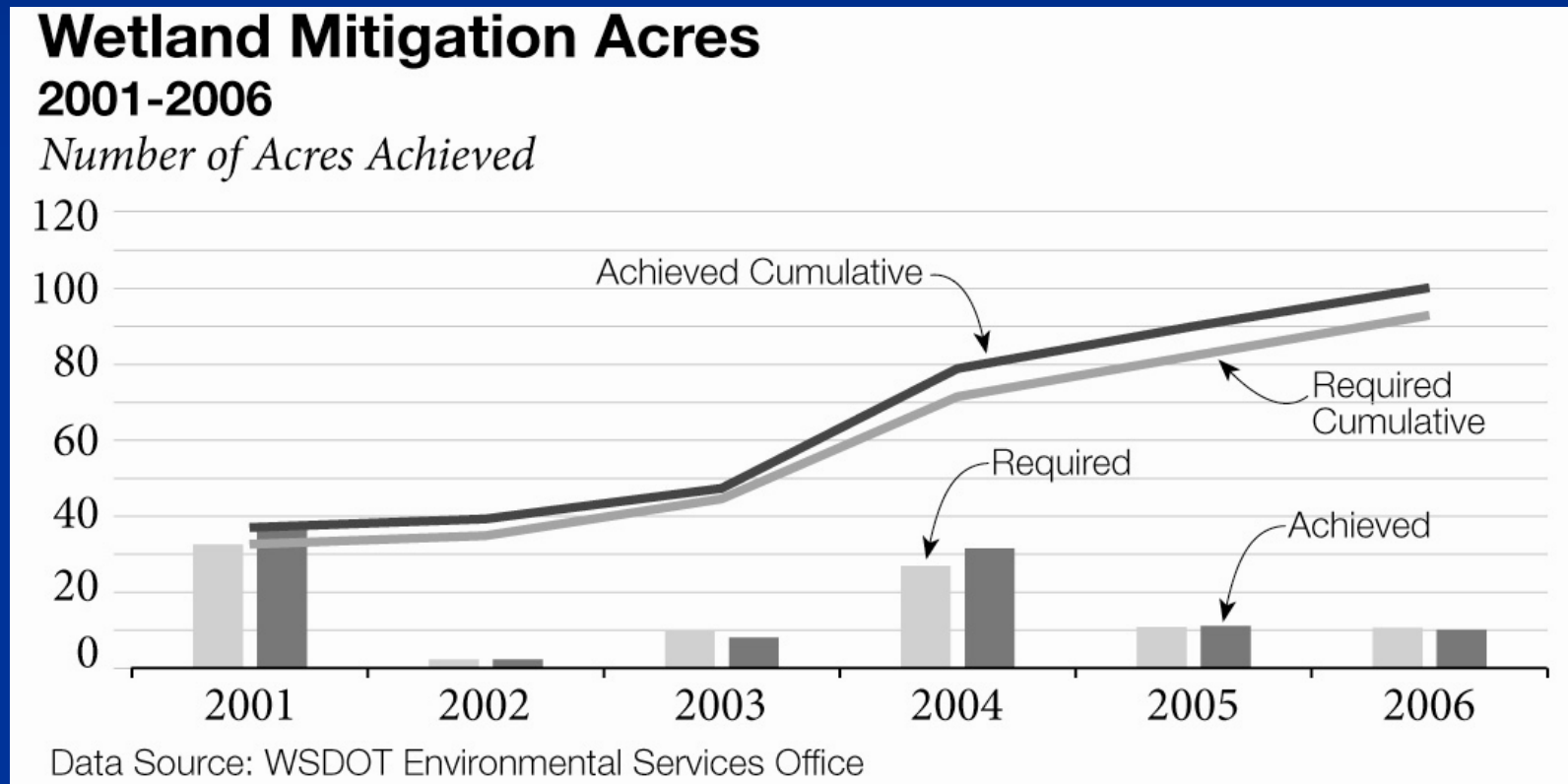


What's Wrong with this Graph?



Real Life Gray Notebook example of a "BEFORE" graph

The Final Version, as it Appeared in the *Gray Notebook*



Real Life Gray Notebook example of an "AFTER" graph, from the December 31, 2006 edition



Principle Five: Good Format/Presentation

- Design of a report should entice the reader to engage with the material, allow a quick grasp of the message, and not distract from the content.
- Employ a reader-friendly page layout
- Group relevant information together

Example of good layout

Highway Maintenance: Annual Update

Integrated Vegetation Management

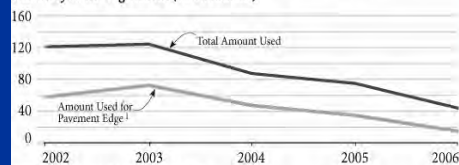
Integrated Vegetation Management (IVM) is the program that manages plants along a roadway's right of way for low maintenance costs and environmental rehabilitation. While most of the responsibility for this work is a component of maintenance, IVM is also dependent on how well roadsides are treated during and after highway construction projects. If roadsides areas are not well maintained and protected in the construction process, maintenance expenses over time tend to be greater due to the presence of unwanted vegetation. However, when soil is conserved and improved, and native vegetation is restored at the time of highway construction, the ongoing roadside maintenance requirements can be relatively low.

Herbicide Use Decreased by 42% from 2005

WSDOT's primary measurement of herbicide use is by pounds of active ingredient. Herbicide use has decreased for the third straight year since 2003. In 2006 the agency's statewide herbicide use for roadside maintenance decreased by 42% from 75,019 pounds in 2005 to 43,892 pounds in 2006. The majority of this reduction is a result of WSDOT's efforts in eastern Washington to minimize the amount of vegetation-free ground along the edge of pavement. As of 2003, 60% of all WSDOT herbicide use was for maintenance of vegetation at the edges of pavement. In 2006, roadside herbicide applications had decreased to 14,823 pounds from 72,630 pounds in 2003, an 80% reduction from 2003. Research has shown that alternative (i.e. IVM) treatments at pavements' edge can be effective with little or no herbicide.

Statewide Herbicide Use Trends 2002-2006

Pounds of Active Ingredients (In Thousands)



Data Source: WSDOT Maintenance Office

¹ Included in "Total Amount Used" line

University of Washington IVM Research to Aid WSDOT

WSDOT is continuing to refine its policy and practice for implementing IVM through an ongoing research project. Following research and investigation by the University of Washington in 2005, WSDOT is conducting documented field trials on alternative methods. Thirty eight sites were selected in 2006 to monitor costs and overall results of 19 alternative approaches for a three year period. More information is available online:

www.wsdot.wa.gov/Maintenance/vegetation/research.htm

In 2006, WSDOT adopted restrictions above and beyond existing federal and state legal mandates for herbicides use. This was done in response to an independently commissioned risk assessment of the application methods used on Washington State highway roadsides. These new WSDOT restrictions limit the types of herbicides allowed for use, and implement buffers in and around sensitive areas. Additional information on WSDOT's herbicide use policy is available online: www.wsdot.wa.gov/Maintenance/vegetation/herbicide_use.htm



Image of U.S. 12 east of Tri-Cities, where the roadside was constructed to establish native grass species.



Principle Six: Quality Control, It's Your Credibility

- Ensure an audit trail
- Question data and text
- Performance reporting is not a spectator sport



Principle Seven: Good Timing: Lead - Don't Follow

- Timing is everything
- Where to begin:
 - What are we responsible for?
 - What is important for us to know about our programs?
 - What is important for the public or media to know about us?
 - How do we know we are doing what we said we would do and are funded to do?
 - What data do we have to support any of these questions?

Resources and Contacts

- WSDOT's overall Accountability site: <http://www.wsdot.wa.gov/accountability/>
- WSDOT's quarterly performance report: the *Gray Notebook*:
<http://www.wsdot.wa.gov/NR/rdonlyres/1668E9EB-8A54-4B08-81B3-B64CBADBB0B2/0/GrayNotebookMar07.pdf>
- Performance Measurement at WSDOT Folio
[http://www.wsdot.wa.gov/NR/rdonlyres/07E1F62D-0BF9-47B9-AE06-1B8F26D51A57/0/Performance Measurement Folio 2007.pdf](http://www.wsdot.wa.gov/NR/rdonlyres/07E1F62D-0BF9-47B9-AE06-1B8F26D51A57/0/Performance%20Measurement%20Folio%202007.pdf)
- *Bridging the Gap Between Agencies and Citizens: Performance Journalism Offers A Practical Solution to Communicate Performance Results* (Bremmer and Bryan, Unpublished- TRB Submitted)
- *Making the Case for Funding: The WSDOT Experience* (Bremmer and Bryan, Unpublished- TRB Submitted)
- *Emerging Performance Measurement Responses to Changing Political Pressures at State DOT's: A Practitioner's Perspective*
[http://www.wsdot.wa.gov/NR/rdonlyres/139F581F-0CED-40E6-B3DB-E89581B016DF/0/Practitioners Perspective.pdf](http://www.wsdot.wa.gov/NR/rdonlyres/139F581F-0CED-40E6-B3DB-E89581B016DF/0/Practitioners%20Perspective.pdf)