

NELAP SURVEY

Conducted Nov. 7th to Dec. 20th, 2008

Conducted by:

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THANK YOU
~~THANK YOU~~
THANK YOU

**Thank You to all of the
Laboratories that invested the
time to complete this survey!**

Special Thanks.....

Critical Review & Content

- **Alfredo Sotomayor (WI DNR)**
- **Jerry Parr (TNI)**
- **Kelly Black (Neptune, Inc.)**
- **Steve Arms (FL DOH)**
- **Lara Autry (EPA)**

Editorial Review & Format

- **Dr. Zubair Mohamed (WKU)**
- **John Warren (EPA)**
- **Kirsten McCracken (TestAmerica)**
- **Dan Tholan (Consultant/Statistician)**

Beta Testing

- **Steve Arms (FDOH - ELCP)**
- **Bob Wyeth (CAS)**
- **Kirsten McCracken (TestAmerica)**

- **Jeff Flowers (Flowers Chemical Labs)**
- **Yvette Wilson (FDOH - Lab)**
- **Bob Di Rienzo (Datachem)**

Support

WESTERN KENTUCKY UNIVERSITY



A LEADING AMERICAN UNIVERSITY WITH INTERNATIONAL REACH

Paula Newby & Dr. Zubair Mohamed- Advisor

Environmental Science Corporation | Mt. Juliet, TN

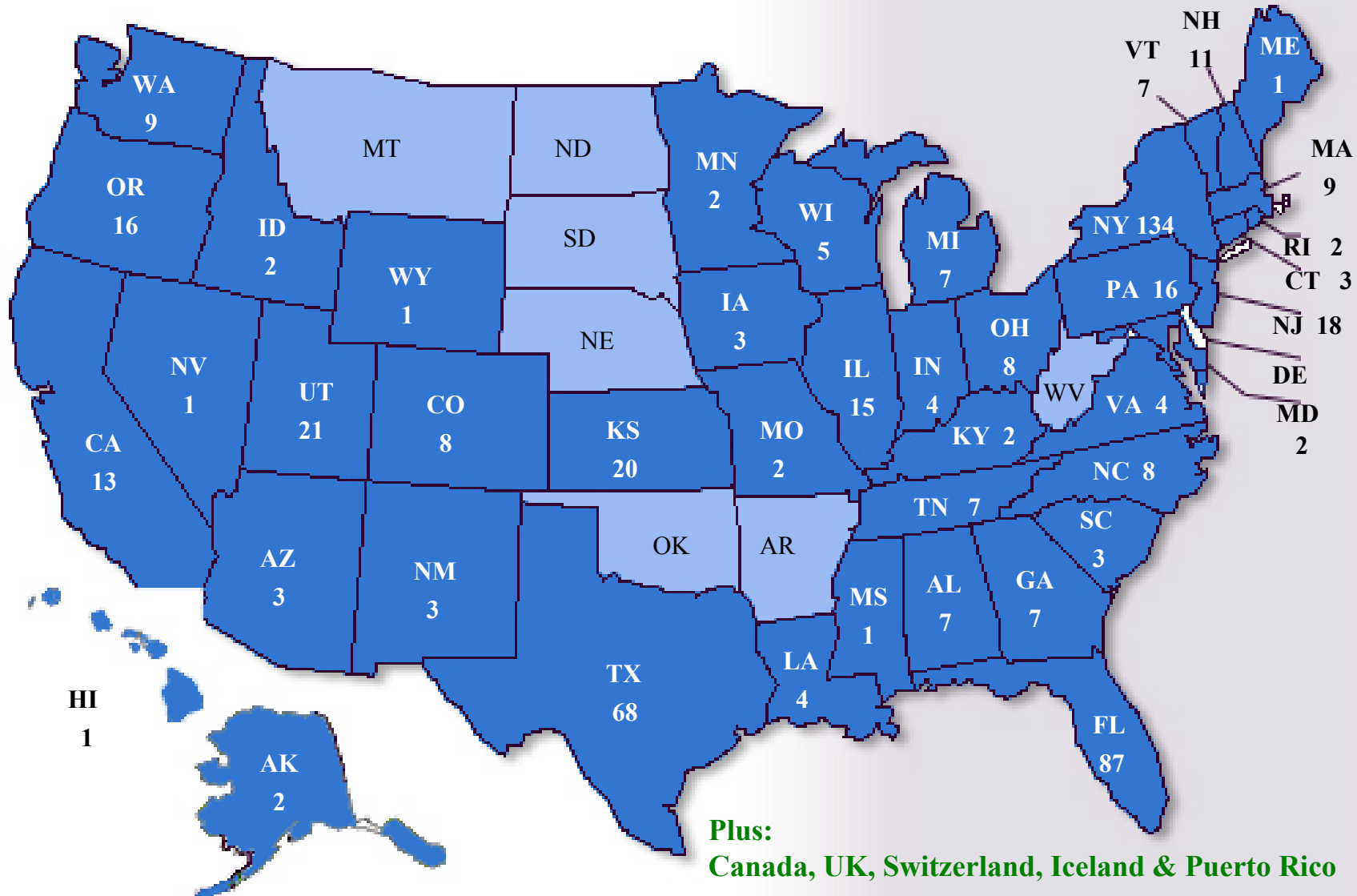


YOUR LAB OF CHOICE

NELAP Survey

- ~1200 Laboratories contacted
- 553 Responses representing 42 States & 6 Countries

>40% Participation



Survey Content

Laboratory Profile

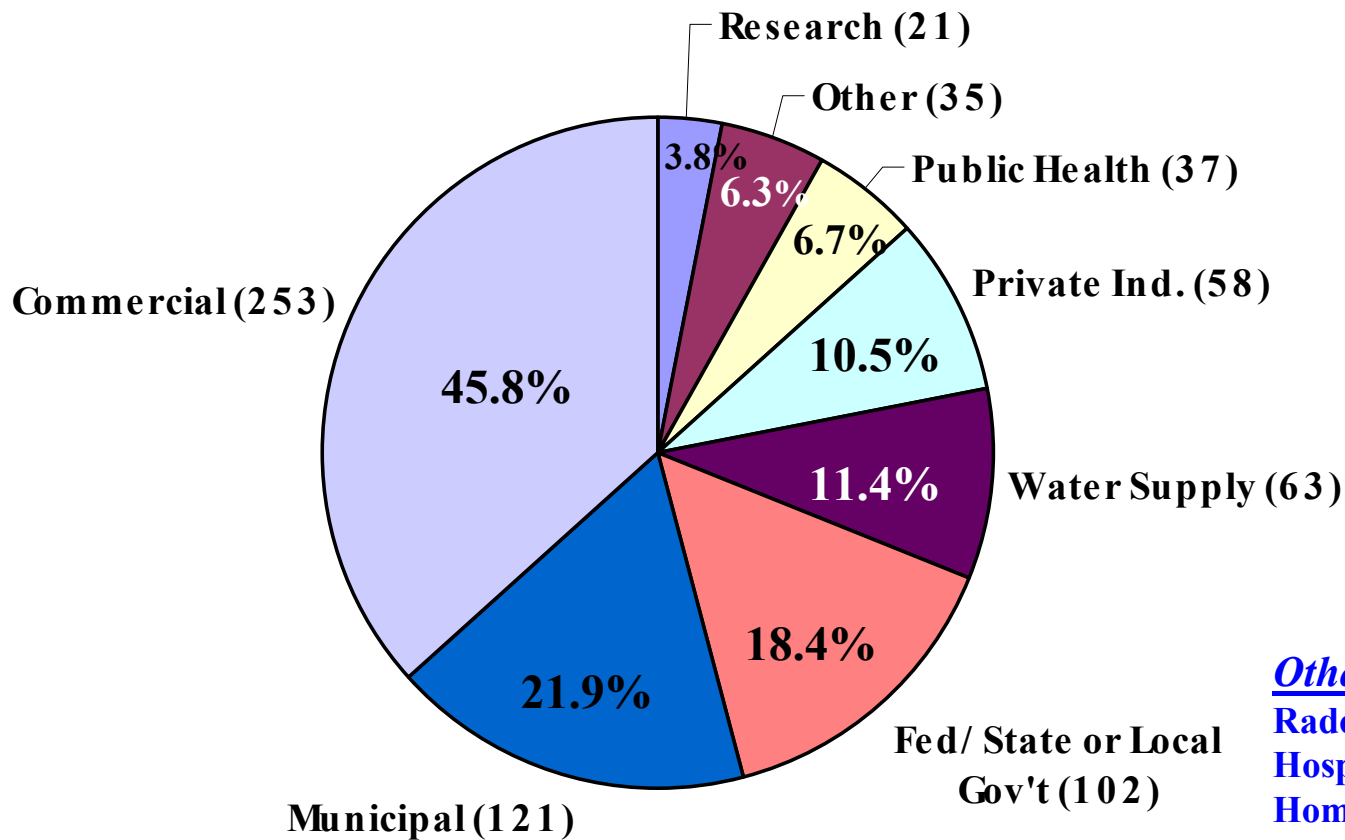
10 Questions

Survey Questions

(91 Individual Items to be answered or ranked)

- **Motives for Seeking Accreditation**
- **Observed Benefits of Accreditation**
- **Quality Systems**
- **Proficiency Testing**
- **General Observations**

Respondents by Sector



- Other (35):
- Radon
 - Hospital
 - Home Inspection
 - University Lab
 - Engineering Firm
 - Nuclear Power
 - River Authority
 - Forge Quality

Respondents by Title/Position

Position	# Responses
Quality	150
Lab Process/Production	73
Both Quality and Lab Process/Production	289
Other	41

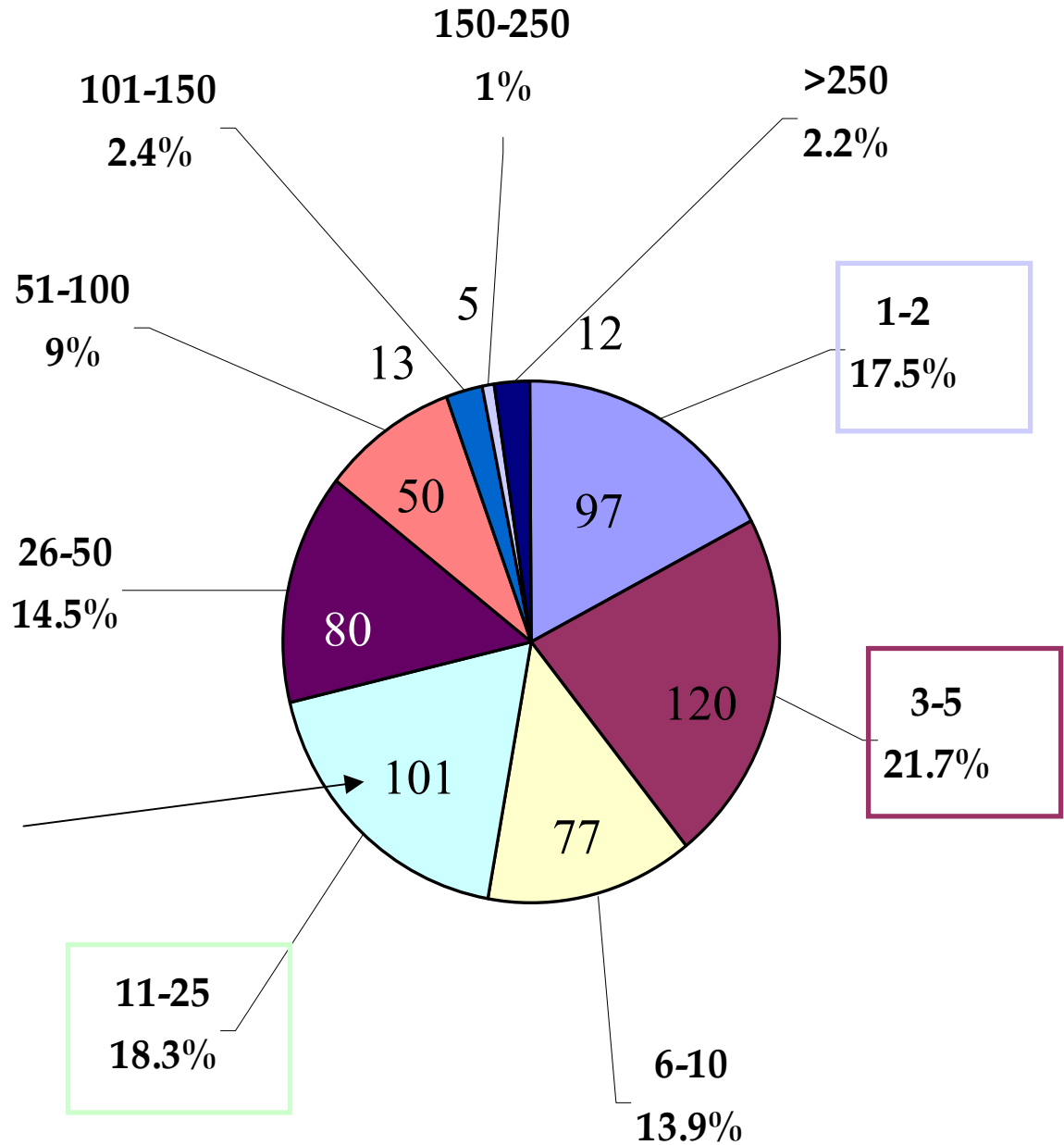
Response Percentages

Lab Size:

Represented by
Number of
Employees

Lab Size # emp →

of respondents →



29 Other Certifications Identified

(state agencies excluded)

- AACCC
- AAFCO
- AALAC
- AIHA
- AOAC
- AOCS
- ASTA
- CALA
- CLEP, CLEA
- CLIA
- CLP Program
- EPA Crypto
- EPA Regional Cert.
- FDA
- FQSI
- Home Radon
- ISO 14001
- ISO 9001
- JMAFF
- MAP
- NFTA
- NRC
- NVLAP
- QEP
- QSTI
- SCC
- SWEDAC
- UK
- USDA

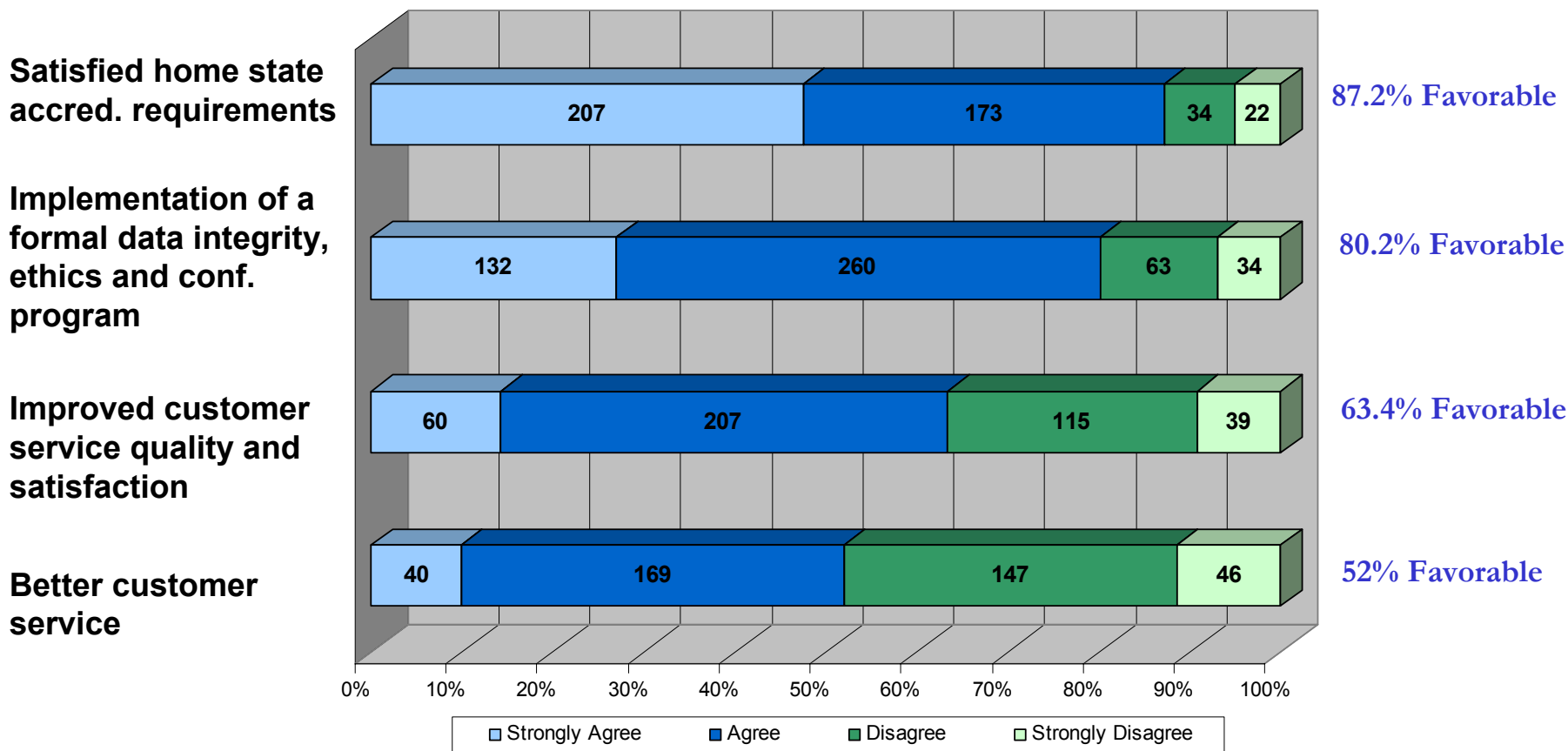
Category 1

GENERAL BENEFITS

- **Data Integrity, Ethics & Confidentiality**
- **Auditing**
- **Customer Service**

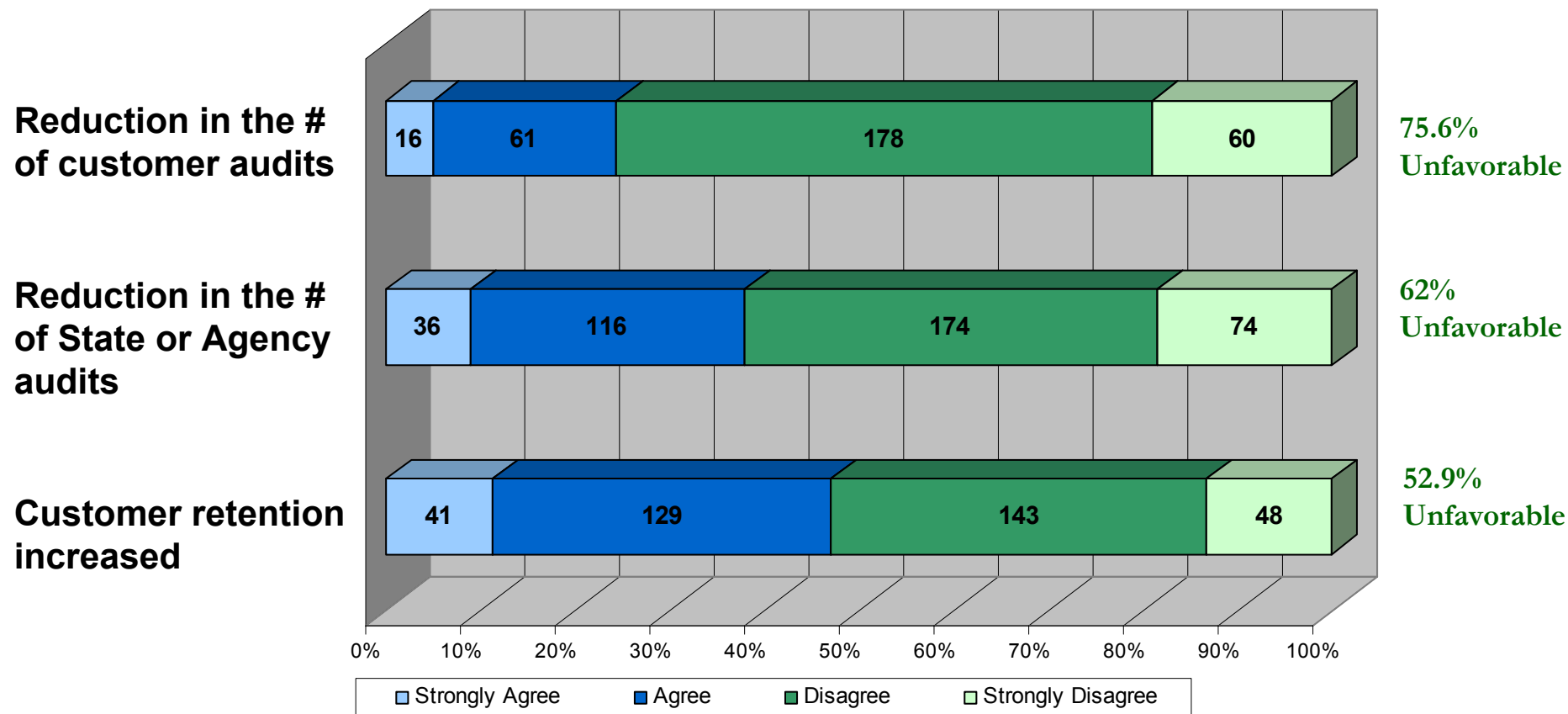
DRAFT Results

80% of Labs Believe that NELAP Improves Data Integrity, while greater than half see improvement in customer service and customer satisfaction



**12 Comments*

>60% of Labs Believe that NELAP has not reduced Customer or State/Agency Audits and do not believe that it has helped with customer retention.



Category 2

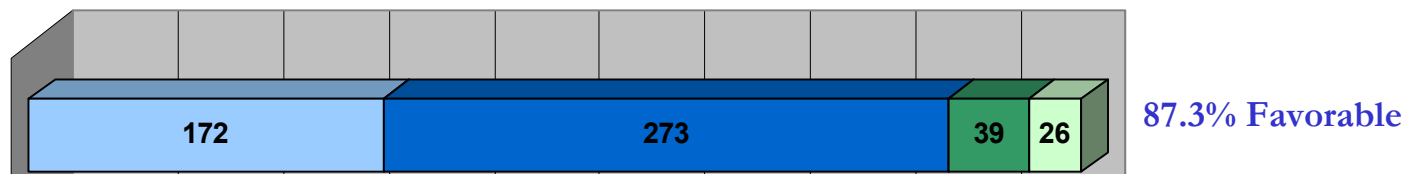
QUALITY BENEFITS

- **Analytical Quality**
- **Quality Systems**
- **Supplier Quality**
- **Continuous Improvement**
- **Defensibility/Traceability**

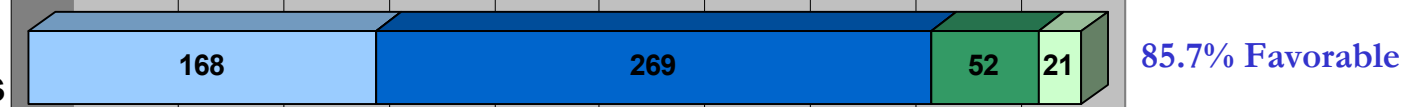
DRAFT Results

>85% of Labs Believe that NELAP Improves Defensibility & Quality

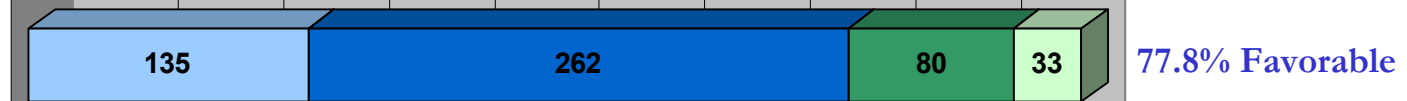
Improved quality system



Resulted in overall defensibility and traceability of process



Improved product and/or analytical quality



Prompted a continuous improvement attitude

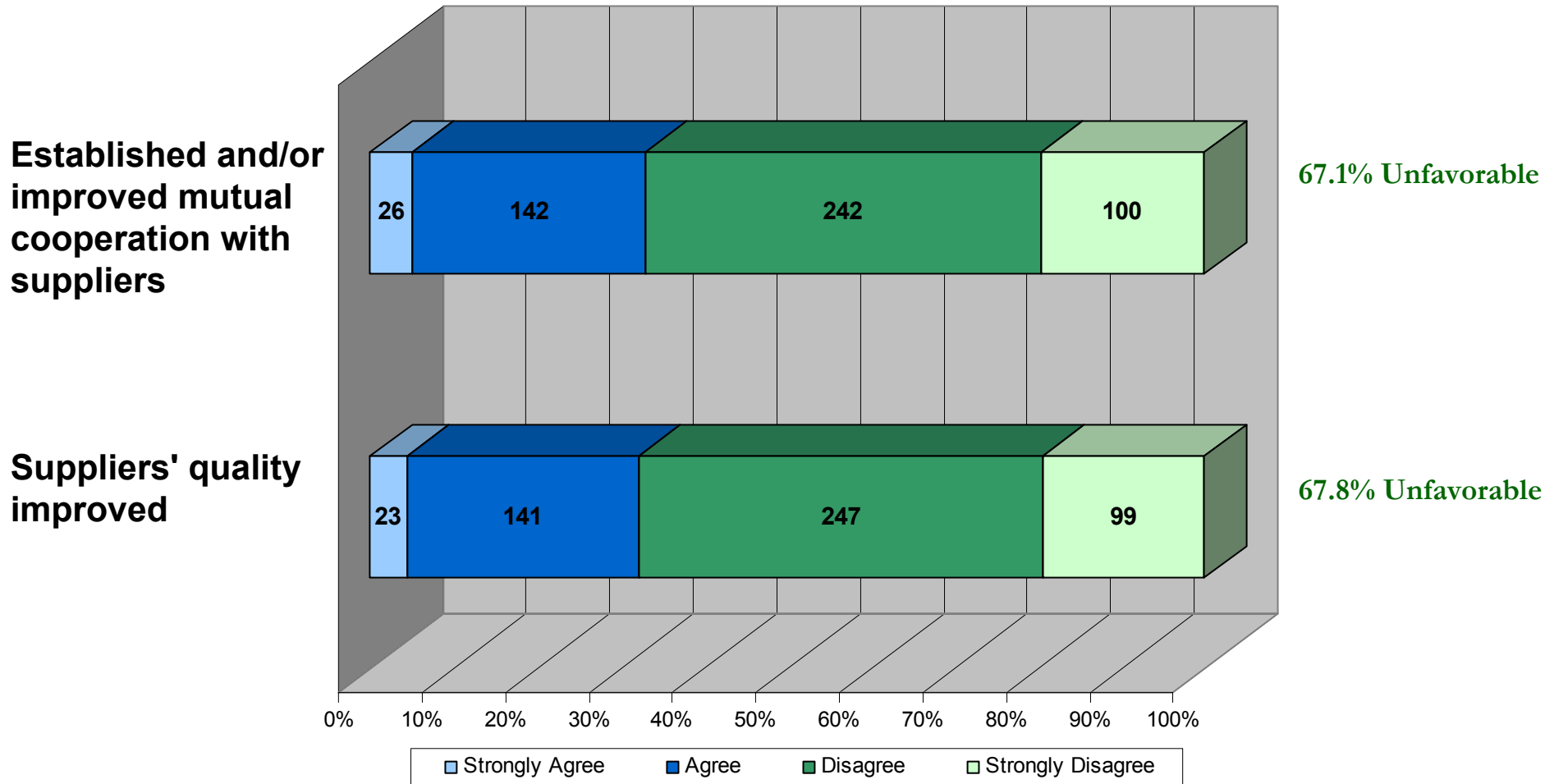


0% 10% 20% 30% 40% 50% 60% 70% 80% 90% 100%

Strongly Agree Agree Disagree Strongly Disagree

**4 Comments*

Labs Believe NELAP Does Not Improve the Supplier Relationship

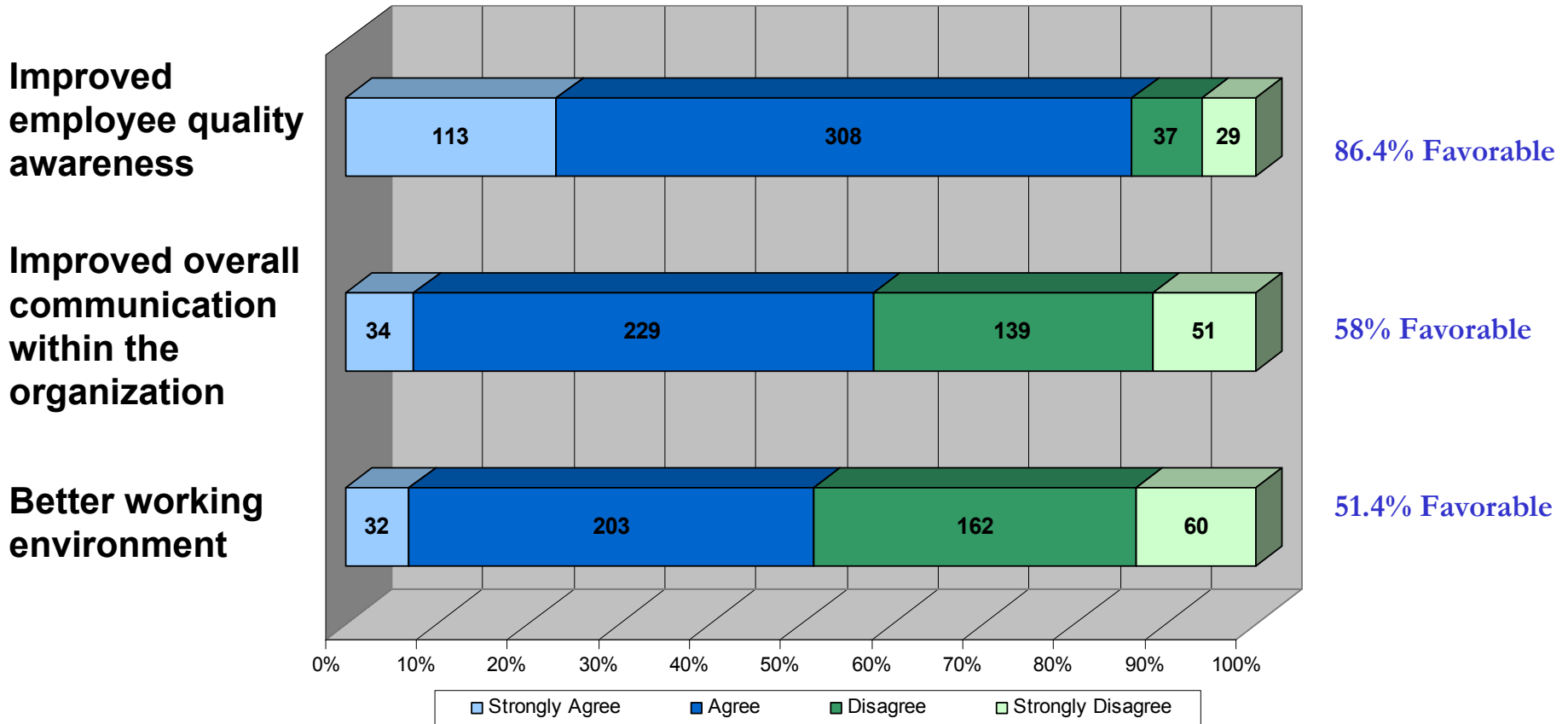


Category 3

Organizational & Financial Benefits

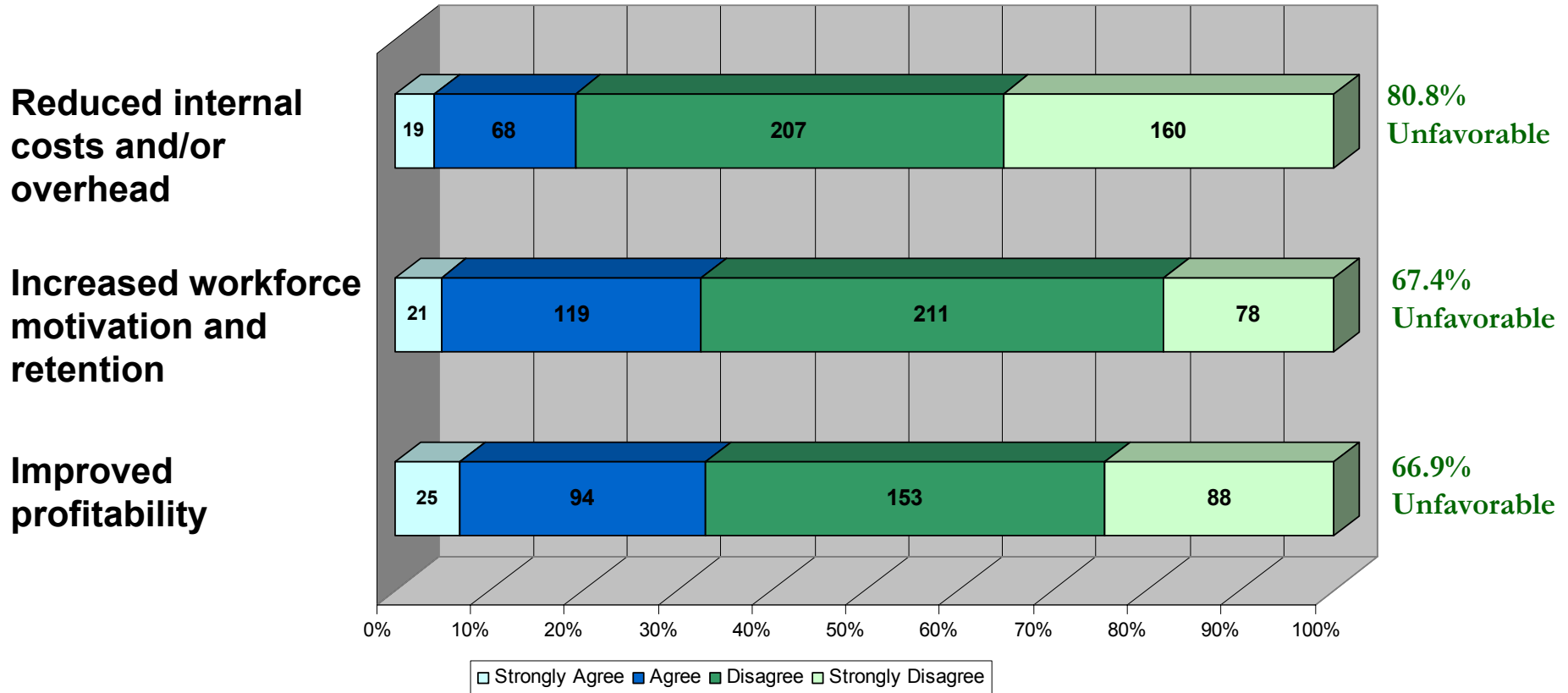
- **Workforce Motivation**
- **Organizational Communication**
- **Quality Awareness**
- **Profitability**
- **Cost and Overhead**

“Organizational benefits are realized by NELAP labs”



**6 Comments*

“Financial benefits are not realized”



Category 4

Process and Productivity

- **Training**
- **Efficiency**
- **QC Rejections and Complaints**
- **Workforce Consistency**
- **Procedures**

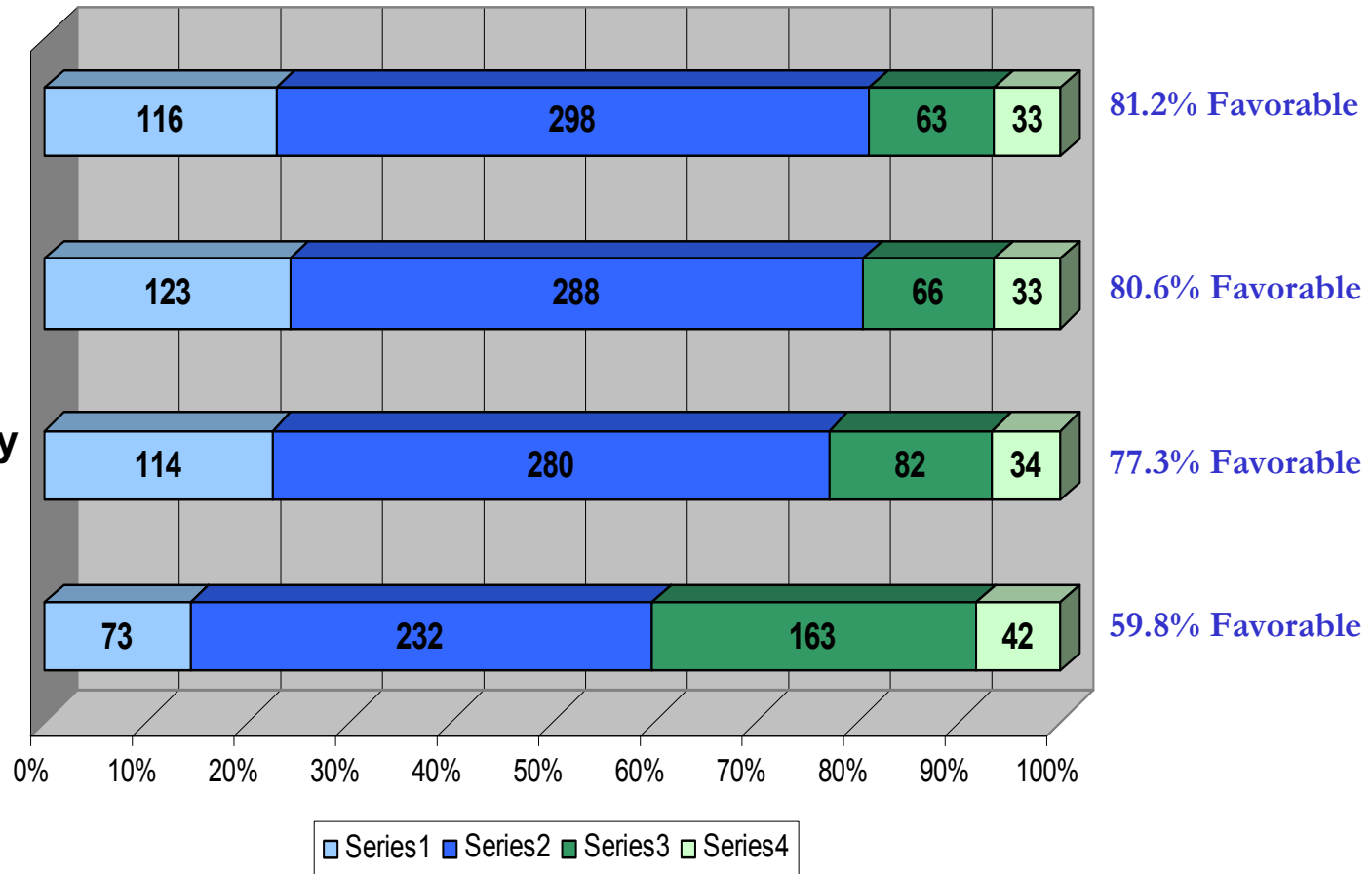
Communication, Consistency, and Improvement of Processes Prove to be a Universal Benefit of NELAP

Improved training program and communication

Improved processes and procedures

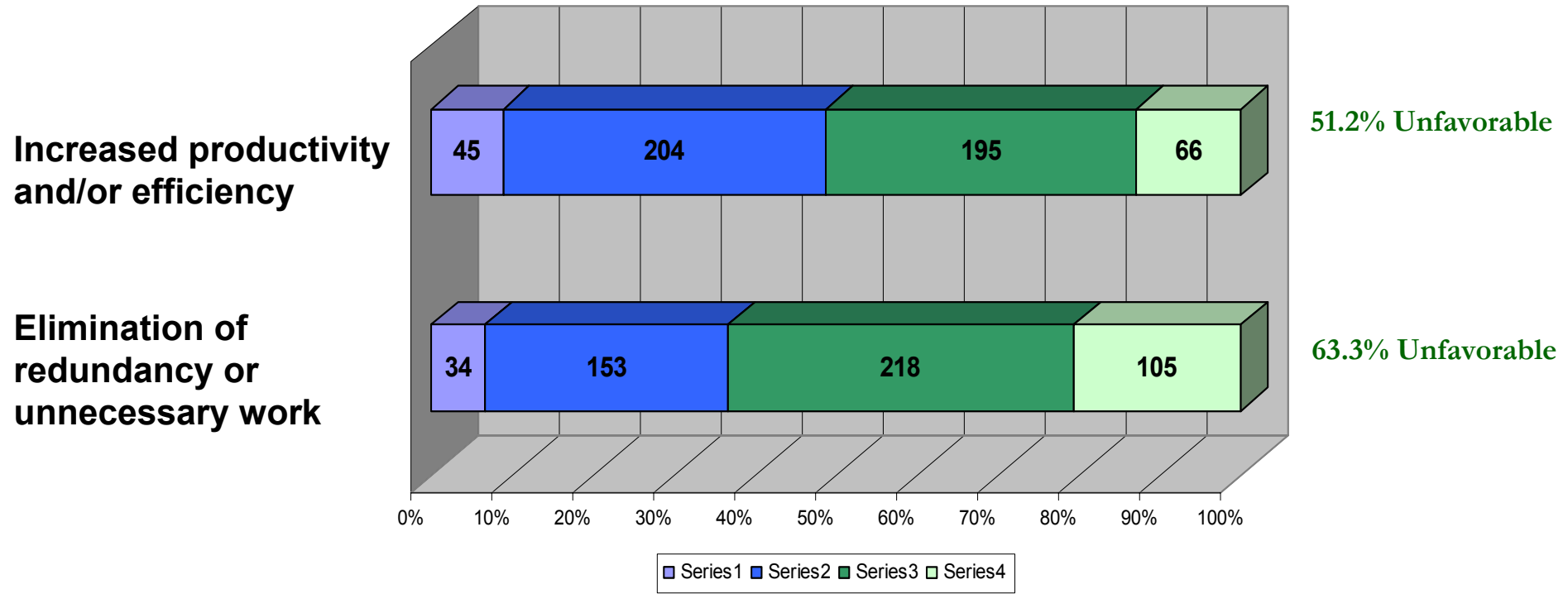
Improved consistency between employees

Reduction in QC incidents, rejections and complaints



** 2 Comments*

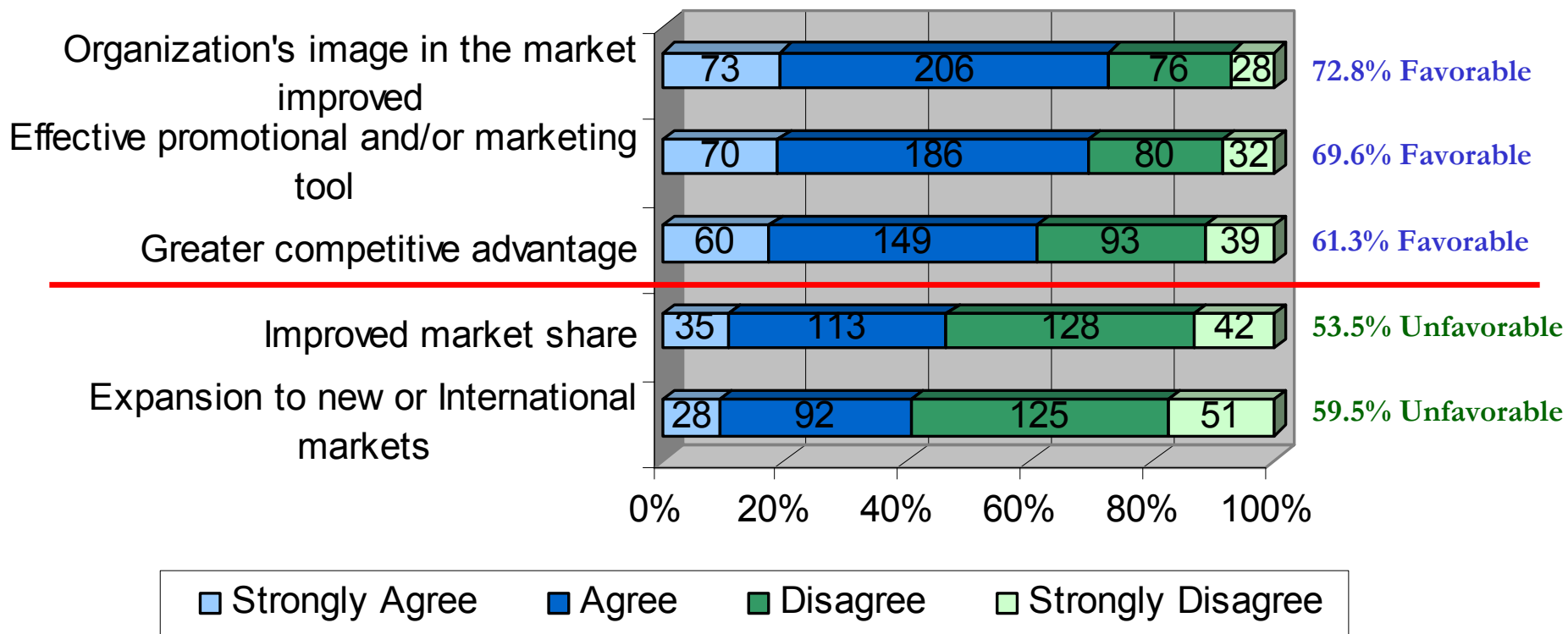
Increased Productivity/Efficiency and Elimination of Redundancy Does Not Appear to be a Benefit



Category 5 Marketing

- **Image**
- **Promotional Impact**
- **Competition**
- **Expansion**
- **Market Share**

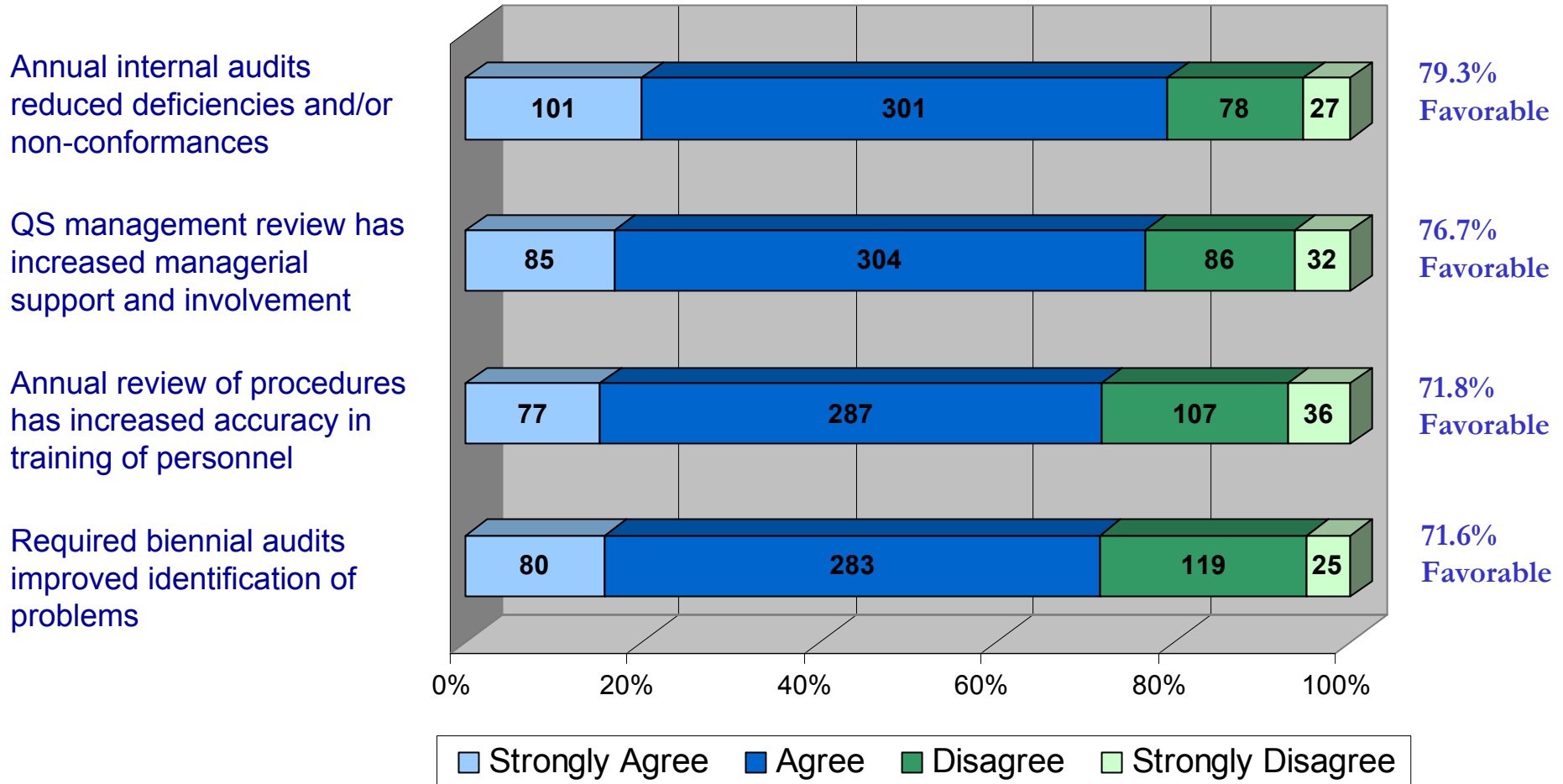
*Marketing Image and Competitiveness are a Plus.....
Shows Little Benefit to Market Share Increase*



Quality Systems

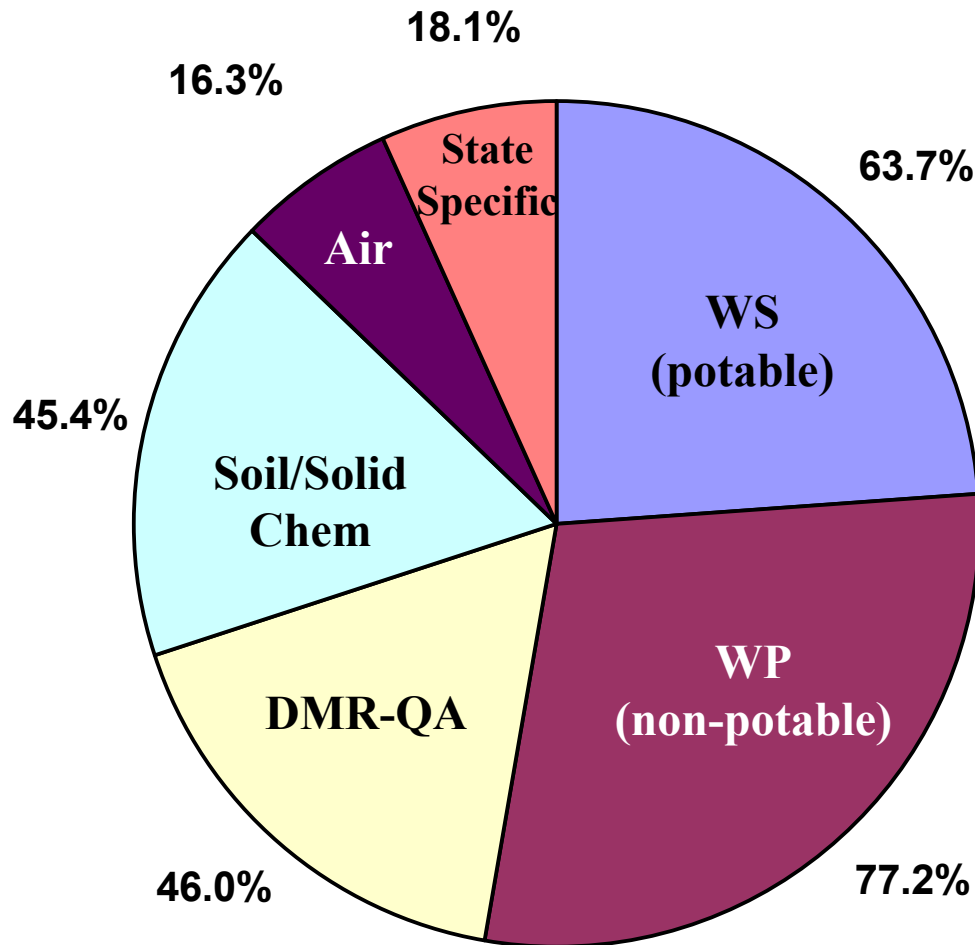
- **Internal Audits**
- **Management Review**
- **Annual Review of Procedures**
- **Required Biennial Audits**

QUALITY SYSTEMS Returns an Overall FAVORABLE Rating of 75%



**6 Comments*

Performance Testing - Participation

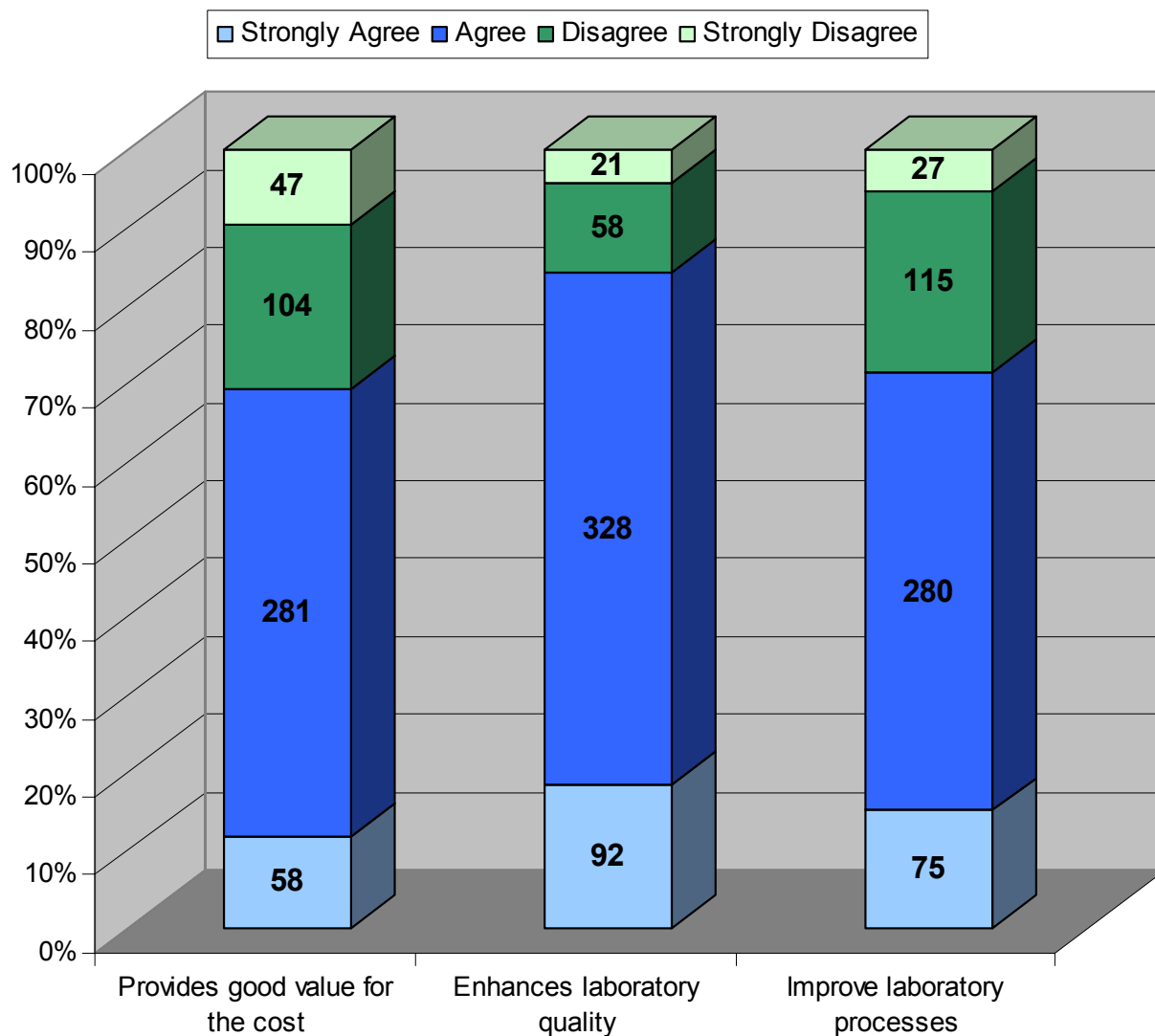


**25 Comments*

\$ On the Average... Labs estimate that the cost to analyze PT samples is 1.25 to 2 times the purchase price of the PT's.

PT Samples...

✓ **The vast majority of NELAP labs believe that PT samples are important.**



Favorable Responses

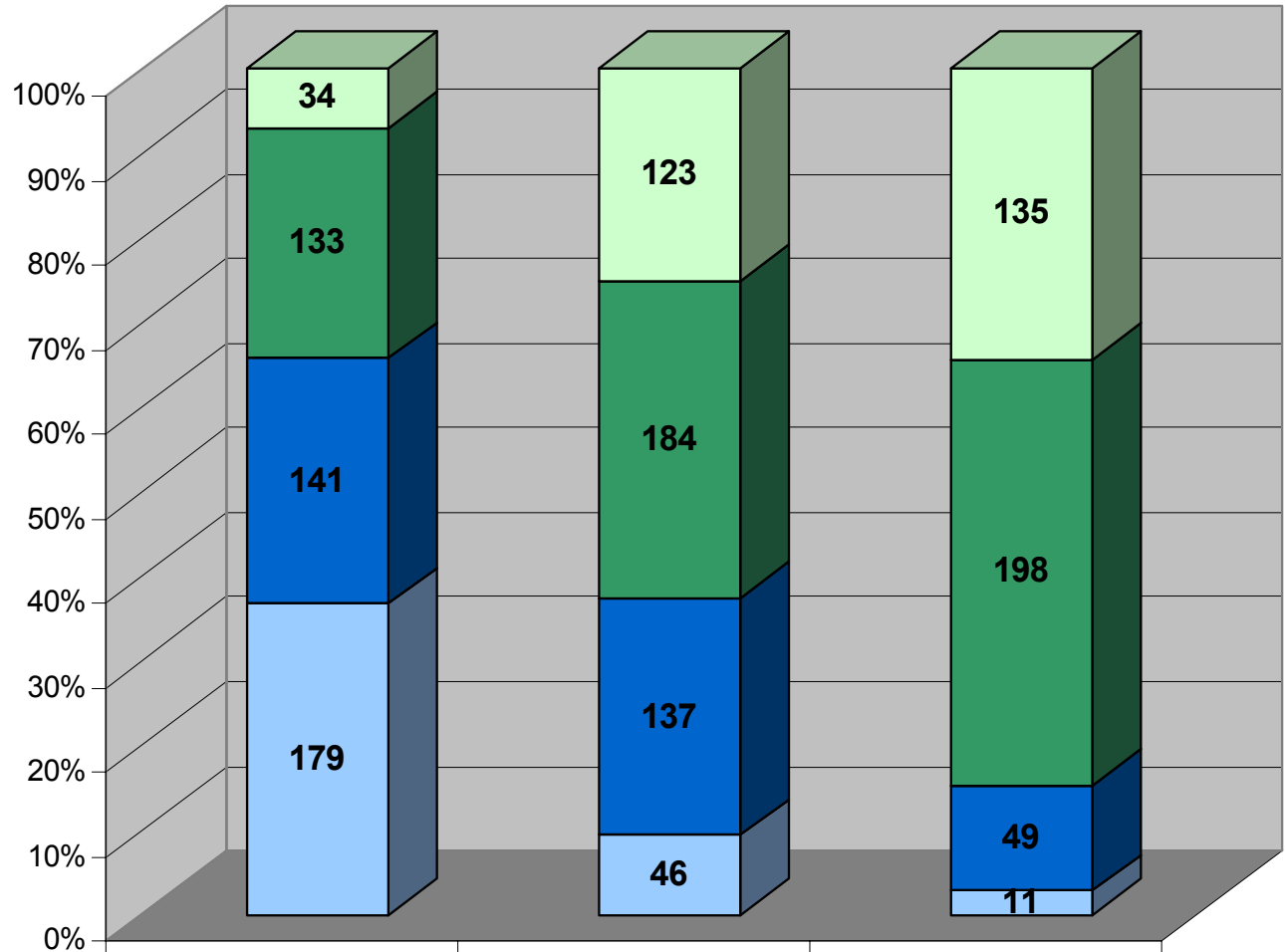
69.2%

84.2%

71.4%

PT Frequency

Strongly Agree Agree Disagree Strongly Disagree



★ Majority of ALL labs believe that 1 PT per year is sufficient and feel that PT's do not enhance marketability.

Favorable Responses

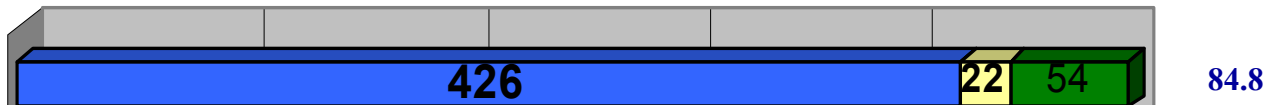
65.7%

37.3%

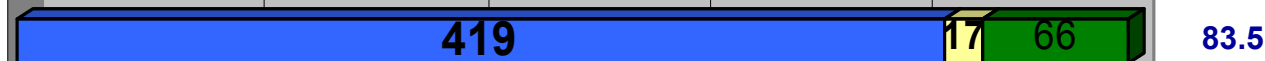
15.3%

NELAP Accreditation gets an overall approval rating of 76.4%

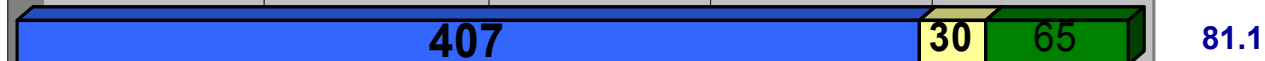
Has made my laboratory more competitive or efficient



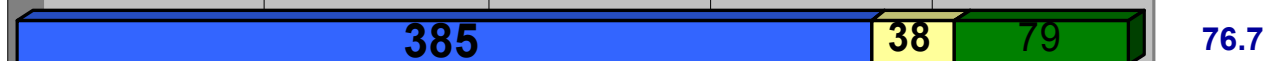
Has improved the quality of the data produced by participating laboratories



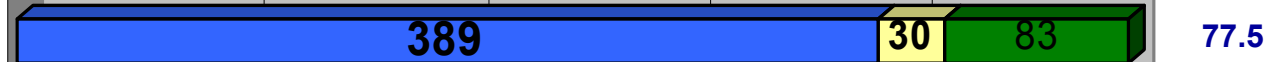
Has improved the quality of the data produced by my laboratory



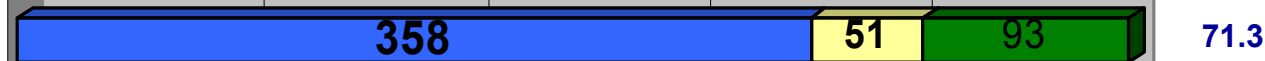
Has improved the defensibility of the data produced by participating laboratories



Has produced a good foundation for a national accreditation program



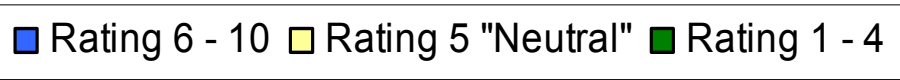
Has made my laboratory a better one



Has improved the defensibility of the data produced by my laboratory



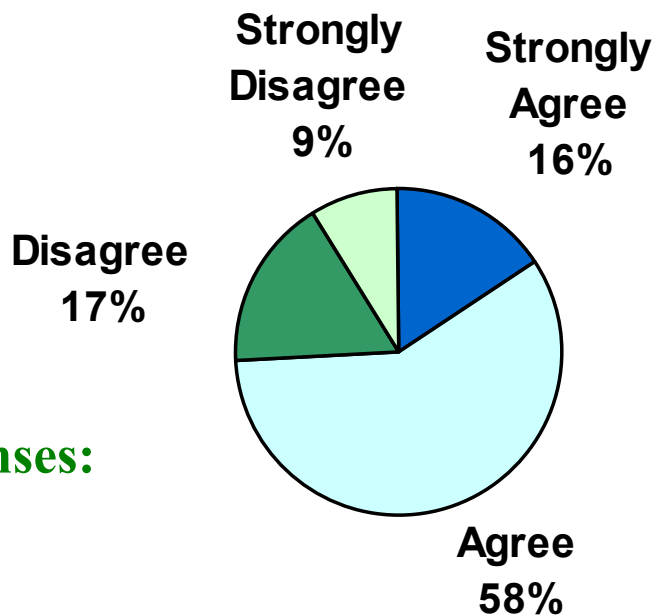
0% 20% 40% 60% 80% 100%



* 39 Comments were submitted

73.9% Believe that overall, the value received is justified by the Benefits

The additional cost to implement and maintain the quality program is justified by the overall benefits.



131 Unfavorable responses:

**43 Comments*

TYPE

- Small Labs
- WWTP
- Private Industrial
- River Authorities
- State/Local Gov't
- Water Supply
- Public Health
- Research

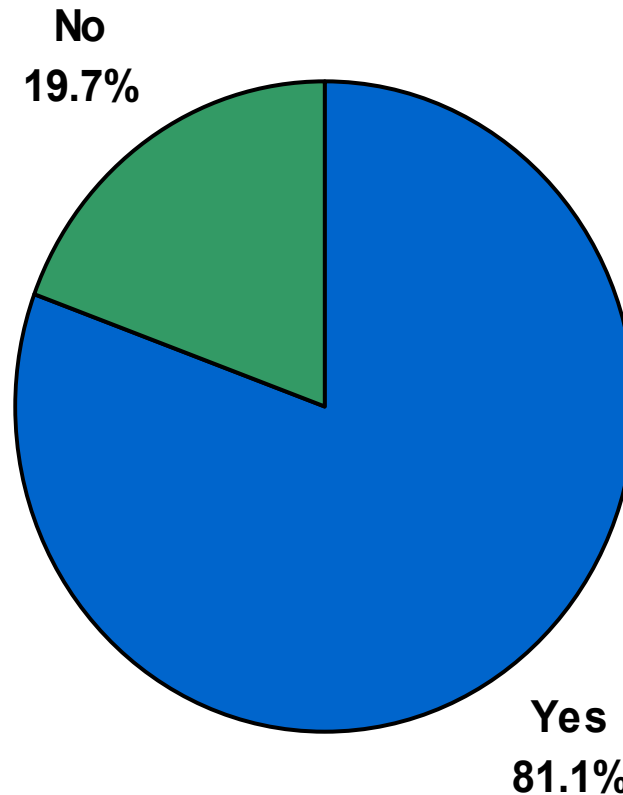
SIZE

#	Emp.	#	EMP
•(26)	1-2	•(16)	26-50
•(27)	3-5	•(11)	51-100
•(24)	6-10	•(2)	101-150
•(22)	11-25	•(3)	>250

Future Recommendation by Current Labs

Survey question:

**Would you recommend
NELAP accreditation for
other laboratories?**



95 Unfavorable responses:

(91 Comments)

TYPE

- 36 - Commercial
- 21 - Municipal
- 13 - Water Supply
- 5 - Public Health
- 7 - Research
- 8 - Fed/St/Gov't
- 3- Private Ind.
- 2 - Other

SIZE (#employees)

- (19) 1-2
- (19) 3-5
- (13) 6-10
- (20) 11-25
- (11) 26-50
- (9) 51-100
- (2) 101-150
- (2) >250

Final Comments on Laboratory Accreditation

143 Comments were submitted

Lab Size (# Employees)	# Comments	# of Unfavorable Ratings of <50% Effective
1 – 2	20	9
3 – 5	33	8
6 – 10	21	7
11 – 25	23	6
26 – 50	18	2
51 – 100	14	4
101 – 150	6	
150 – 250	2	
> 250	6	1
Total	143	37

All Comments Considered

374 Total – From all Categories

#1

National Mandate

- Request for EPA Mandate
- Increased State Involvement
- Eliminate Dual Programs within states

#2 (1 pt behind the #1 Comment)

2-Tier System

- Smaller, Limited Chem, Gov't and Specialty Labs need a scaled implementation program

#3

PT Frequency

- EPA and NELAP should be the same
- Too costly for smaller labs
- No PT's available for some analytes

#4

Uniformity

- Consistency among AB Auditing and Implementation of NELAP Standard
- Consistency among Method requirements

#5

Fees – Too Costly

- Inconsistent across states and AB's.
- 2^o Accred –should be administrative fees only

#6

Improved Data Confidence

- Ethics
- Legal defensibility
- Data integrity

Any Questions?

Thank you for attending!

Judy Morgan
Environmental Science Corporation
Mt. Juliet, TN