

Marketing Experiments

Introduction

- **Experimentation is a key component of the resource allocation portfolio.**
- **It allows us to evaluate the consequence of different marketing actions.**

Correlation vs Causation

***“Half the money I spend on advertising is wasted;
the trouble is I don’t know which half”***

John Wanamaker



Father of Modern Advertising

Marketing Return on Investment

- Why is it hard to measure the Return on Marketing Spending?



What Establishes Causality?

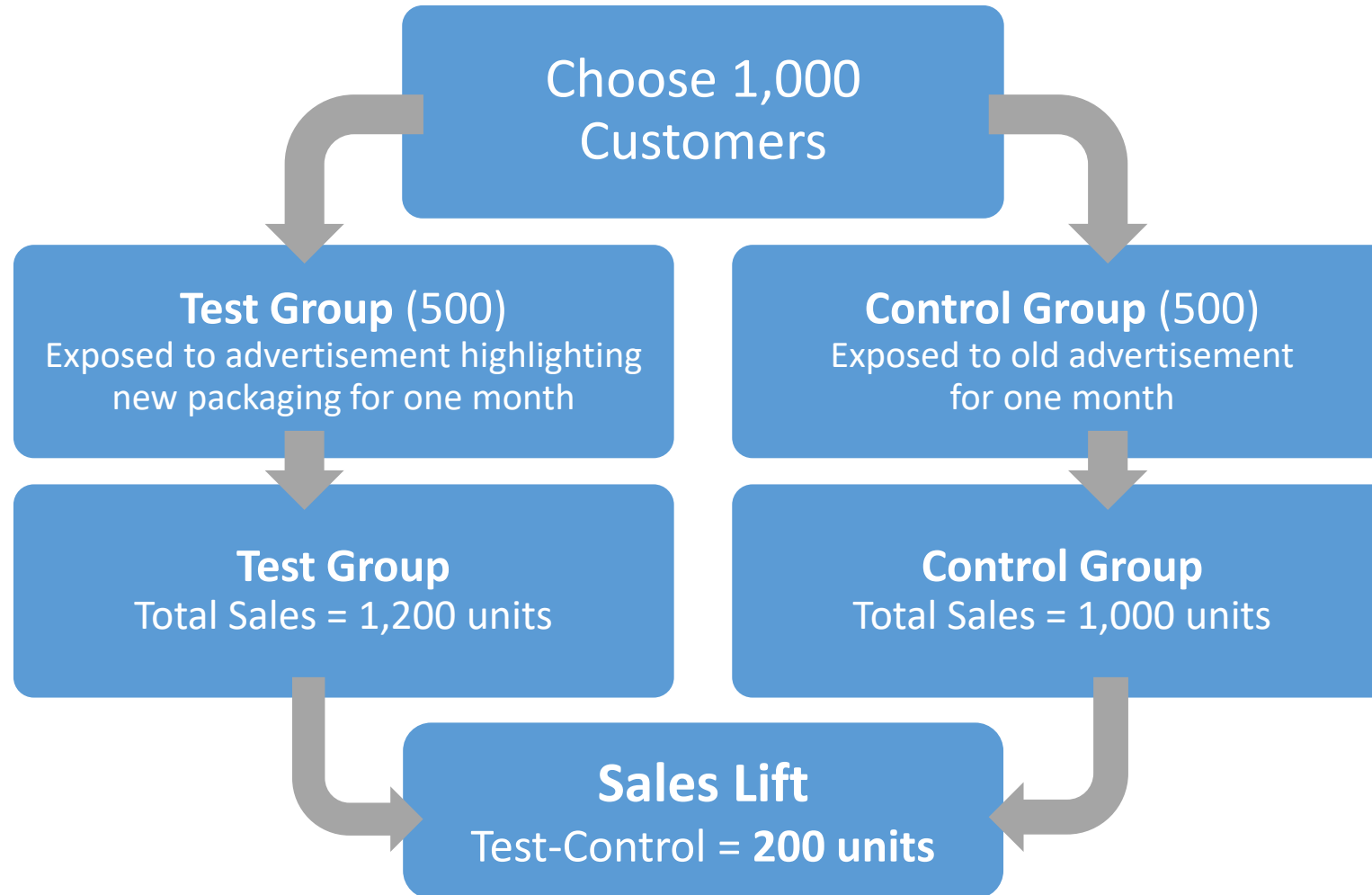
- **Change in marketing mix produces change in sales**
 - Increasing Advertising \$  Increased Sales
- **No sales increase when there is no change in the marketing mix**
 - No Increase in Advertising \$  Same Sales
- **Time Sequence**
 - Increased advertising \$ today leads to higher sales tomorrow
- **No other external factor**
 - When advertising was increased, one of the competitors left the market. So sales increased because of lesser competition not because of increased advertising.

Experiments – The Holy Grail!

One or more independent variable(s) [**Advertising \$**] are manipulated to observe changes in the dependent variable [**Sales or Brand awareness**]



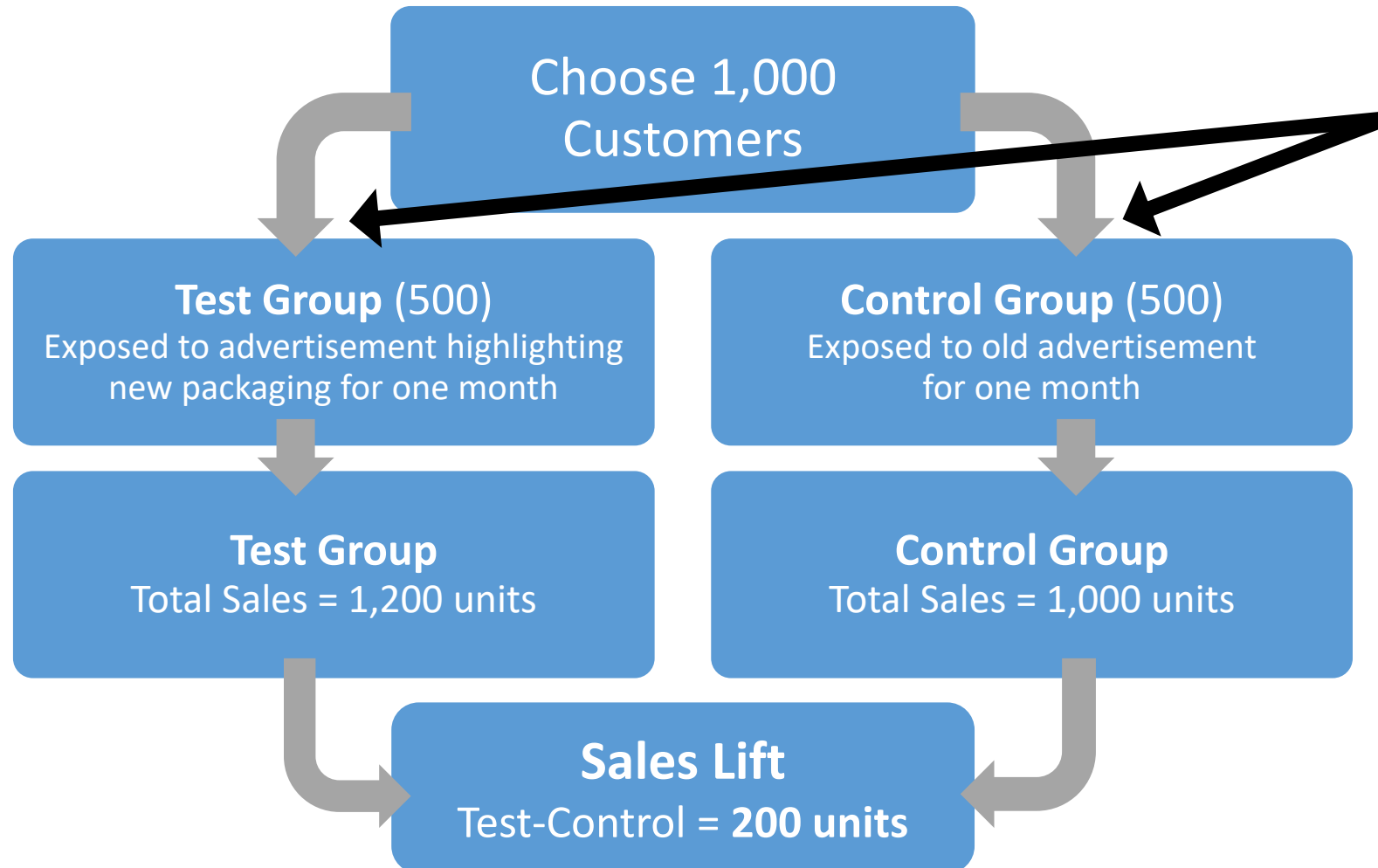
A Basic Experiment



How to assign customers to Experiment and Control Group?

A Basic Experiment

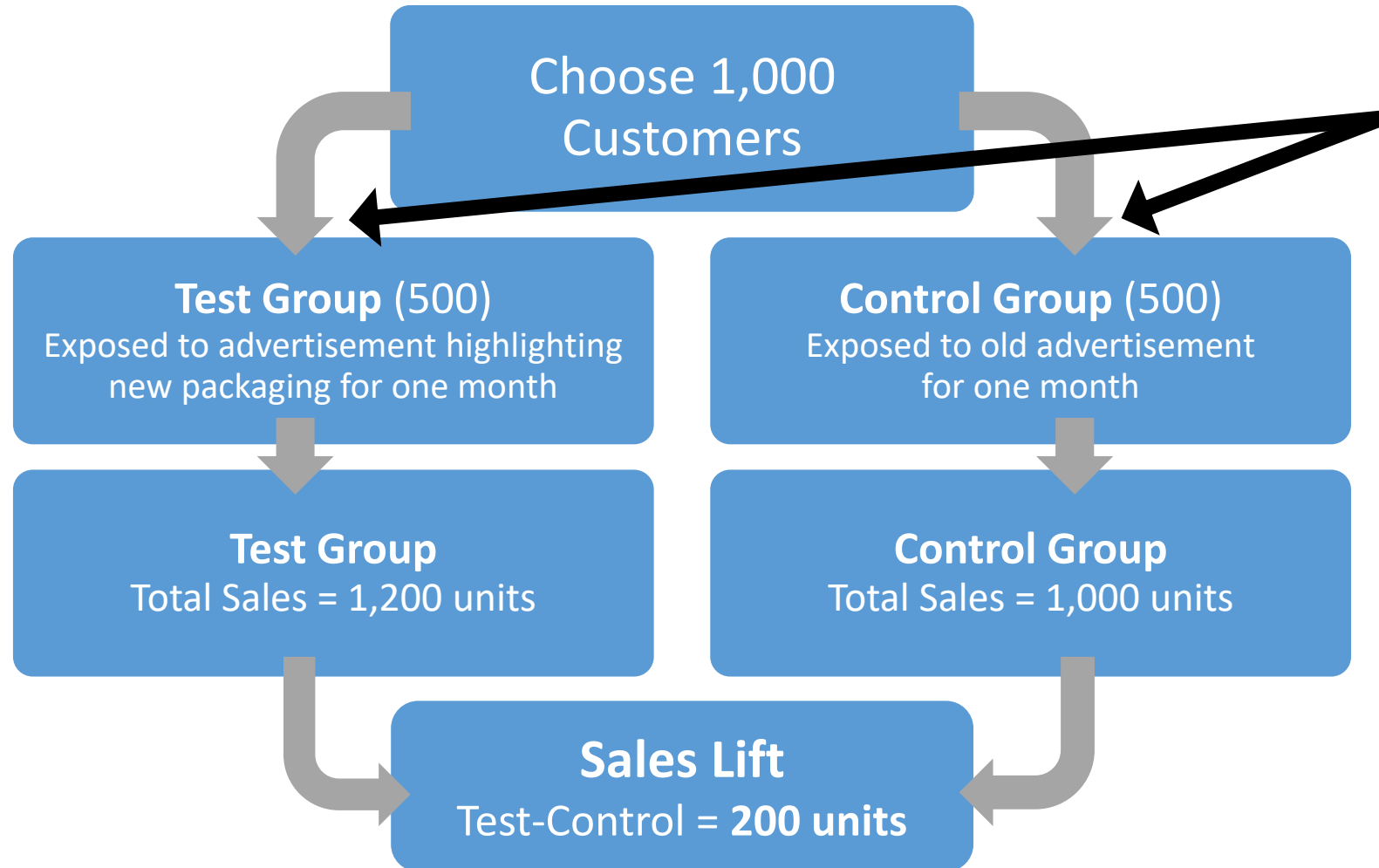
Randomization
can *match* test
and control
groups on all
dimensions
simultaneously,
given a sufficient
sample size



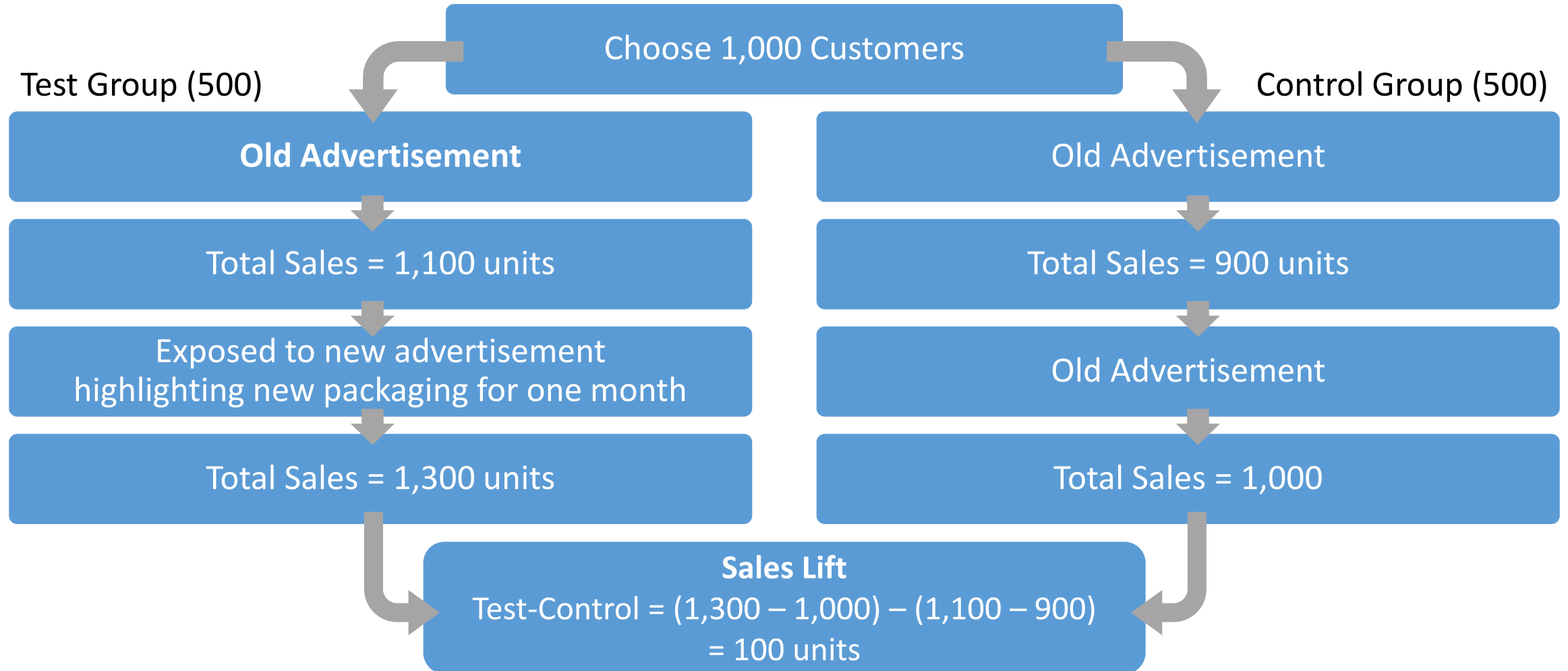
A Basic Experiment

Match

When would this be necessary?



Before – After Design



Web Experiments – Full Factorial Design

Price		
\$1.59	\$1.89*	\$2.15

* Current conditions, so can be considered controls.

Web Experiments – Full Factorial Design

Advertisement Copy	Price		
	\$1.59	\$1.89*	\$2.15
“Lasts Longer”			
“Tastes Better”			
“Good for You”*			

* Current conditions, so can be considered controls.

Web Experiments – Full Factorial Design

Advertisement Copy	Price		
	\$1.59	\$1.89*	\$2.15
“Lasts Longer”		\$1,112	
“Tastes Better”		\$1,030	
“Good for You”*		\$820	

* Current conditions, so can be considered controls.

Web Experiments – Full Factorial Design

Advertisement Copy	Price		
	\$1.59	\$1.89*	\$2.15
“Lasts Longer”		\$1,112	
“Tastes Better”		\$1,030	
“Good for You”*	\$930	\$820	\$770

* Current conditions, so can be considered controls.

Web Experiments – Full Factorial Design

Advertisement Copy	Price		
	\$1.59	\$1.89*	\$2.15
“Lasts Longer”	\$1,315	\$1,112	\$1,206
“Tastes Better”	\$957	\$1,030	\$1,500
“Good for You”*	\$930	\$820	\$770

* Current conditions, so can be considered controls.



your information is secure



BBB Rating: A+
as of 11/30/2017
[Click for Profile](#)



Top Insurance Providers

We work with over 50 top auto insurance companies to find the policy that fits you best.

TRAVELERS

MetLife
MetLife Auto & Home

21st Century
Insurance

Liberty
Mutual
Insurance

Safeco
Insurance
a Liberty Mutual Company

GENERAL
INSURANCE

Direct
Auto Insurance

Amica
Auto, Boat, Life

Elephant
Insurance

MERCURY
INSURANCE

INFINITY
Auto, Boat, Life, Home

KEMPER
INSURANCE

compare.com

Free and impartial comparison
+ 2 million quotes delivered
Insurer confirmed price

1 Vehicle 2 Driver 3 History 4 Quote

Tell us about your vehicle...

Year
2012

Make
FORD

Model
EXPLORER

Next

Online Chat

Get Customer Information






compare.com

Free and impartial comparison
+ 2 million quotes delivered
Insurer confirmed price

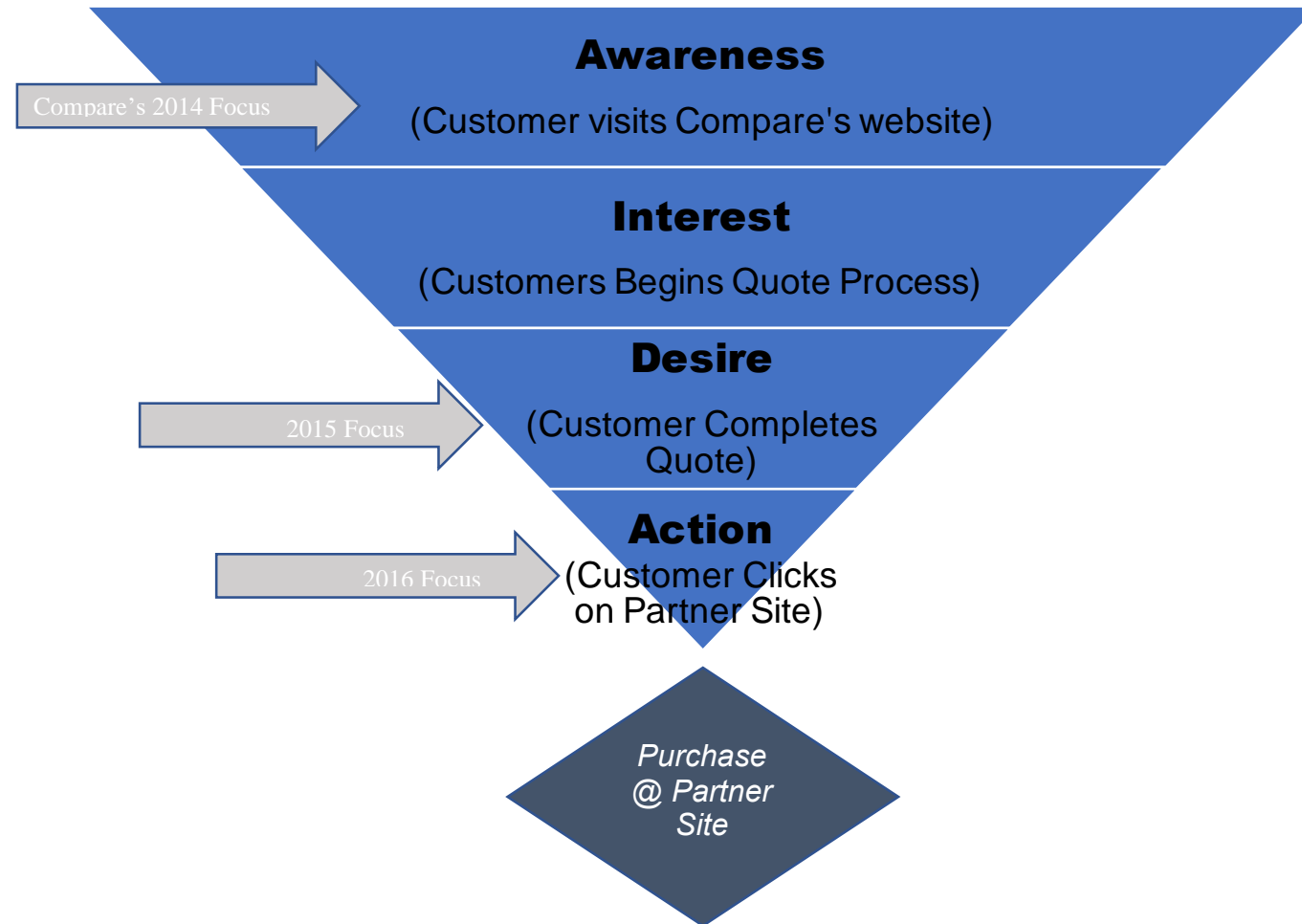
Return your quote details

Select a coverage level Show coverage levels

 Elephant	Pay as you go: \$98 per month From \$200 down payment	Pay up front: \$80 per month \$800 cash or 12 mos.	Pay as you go & up front: Check out online Call an advisor
Sponsored by The Green Insurance Bureau. We provide instant quotes & instant cash.			
 GAINSCO	Pay as you go: \$104 per month From \$100 down payment	Pay up front: \$105 per month \$100 cash or 12 mos.	Pay as you go & up front: Call an advisor
 GENERAL	Pay as you go: \$121 per month	Pay up front: \$109 per month	Pay as you go & up front: Online Chat

Provide Real Quotes from Insurance Providers on Platform

Visual Representation of Compare's Purchase Funnel



Source: Adapted by Case Writer from Compare conversations



1



Vehicle

2



Driver

3



History

4



Quote

Tell us about yourself...

First name

Middle initial (optional)

Last name

Suffix (optional)

Date of birth



Your Summary

Vehicles



2012 FORD EXPLORER

+ Add Edit



Online Chat



1



Vehicle

2



Driver

3



History

4



Quote

Tell us about your vehicle...

Year

2012

Make

FORD

Model

EXPLORER

Next



Online Chat



1



Vehicle

2



Driver

3



History

4



Quote

We need just a few more details...

Do you currently have car insurance?

Yes, I have my own policy



Who is your most recent insurance company?



Please select



What are your most recent Bodily Injury (BI) limits?



☐ Minimum Limit

☐ Greater than minimum but less than 50/100

☐ 50/100 or greater but less than 100/300

☐ 100/300 or greater



Your Summary

Vehicles



2012 FORD EXPLORER

+ Add Edit

Drivers



Tester Tester (36) -
Policyholder

+ Add Edit



Online Chat



1
Vehicle

2
Driver

3
History

4
Quote

One last thing...

We will only use your email address to send you a copy of your quotes and to give you easy access to your past quotes.

Email address

Phone number

I would like to receive:

☒ Price Alerts

☒ Quote Reminders

☒ New Product Notifications

☒ Special Offers

☒ Newsletters

☐ Text Messages



Your Summary

Vehicles



2012 FORD EXPLORER

+ Add Edit

Drivers



Tester Tester (36) -
Policyholder

+ Add Edit



Online Chat



[+ Review your quote details](#)

[Select a coverage level](#)

[+ View coverage levels](#)



[View more info](#)

Pay as you go

\$98 per mo.

Plus \$99 Down Payment

OR

Pay up front

\$80 per mo.

\$964 total for 12 mos.

Free of charge & no commitment



[Checkout online](#)



[Call an advisor](#)



Rated A+ by the Better Business Bureau. We provide "More Care & Less Cost"



[View more info](#)

Pay as you go

\$104 per mo.

Plus \$124 Down Payment

OR

Pay up front

\$105 per mo.

\$631 total for 6 mos.

Free of charge & no commitment



[Call an advisor](#)



Pay as you go

\$121 per mo.

OR

Pay up front

\$109 per mo.

Free of charge & no commitment



[Online Chat](#)



The Problem

- **Compare now partnered with nearly 100 insurance companies and the site was reaching peak levels of traffic (with over a million visitors in both February and March of that year),**
 - the bulk of which (just over 50%) was increasingly coming from mobile devices such as phones and tablets (up from 5% at the start of 2014).
- **The problem, however, was that the completion rates for Compare's questionnaire were at a dramatic low,**
 - with just 12% of site visitors finishing the required form in March, a sudden and
 - unprecedented drop from an all-time-high of 18% for the metric that January.

Options

- **Build A Mobile App**
- **Get email and ask customers to fill questionnaire later**
- **Predict Premiums and provide a banner ad @ the beginning**

Banner Test Implementation

- **Banner Estimate – Low, Average**
- **Location of Page – top**
- **Graphic – Static**
- **Driver – Good**

States

State	Carriers on Panel	Avg. Rates Returned
Georgia	9	3
Texas	18	7
Virginia	12	4



Drivers in Virginia were quoted **\$132** per month on average for state-minimum coverage. [?](#)

Tell us about your vehicle...

Year [?](#)

Make

Model [?](#)

Select your vehicle's anti-theft features (if any) [?](#)

- ☐ Automatic Disabling
- ☐ Crackle
- ☐ Vehicle Recovery Device

Vehicle Ownership

Years of ownership

Primary Vehicle Use [?](#)

Estimated annual mileage [?](#)

Do you keep your car at your home address? [?](#)

- ☐ No
- ☐ Yes

Compare.com will only verify with valid license records and cannot guarantee that you receive the best possible rate on car insurance. In addition to the information you provide, most insurance companies use other information sources to calculate an accurate price for your insurance. These other sources include driving records, your claims history, a personal report, and/or area credit history.

By clicking "I Agree and Continue", you are granting your personal information to the following:

[← Back](#)

[I Agree and Continue →](#)





Tell us about your vehicle...

Year 2

Make

Model 2

Select your vehicle's anti-theft features (if any) 1

- ☐ Automatic Unlocking
- ☐ OnStar
- ☐ Vehicle Recovery Device

Vehicle Ownership

Years of ownership

Primary Vehicle Use 2

Estimated annual mileage 2

Do you keep your car at your home address?

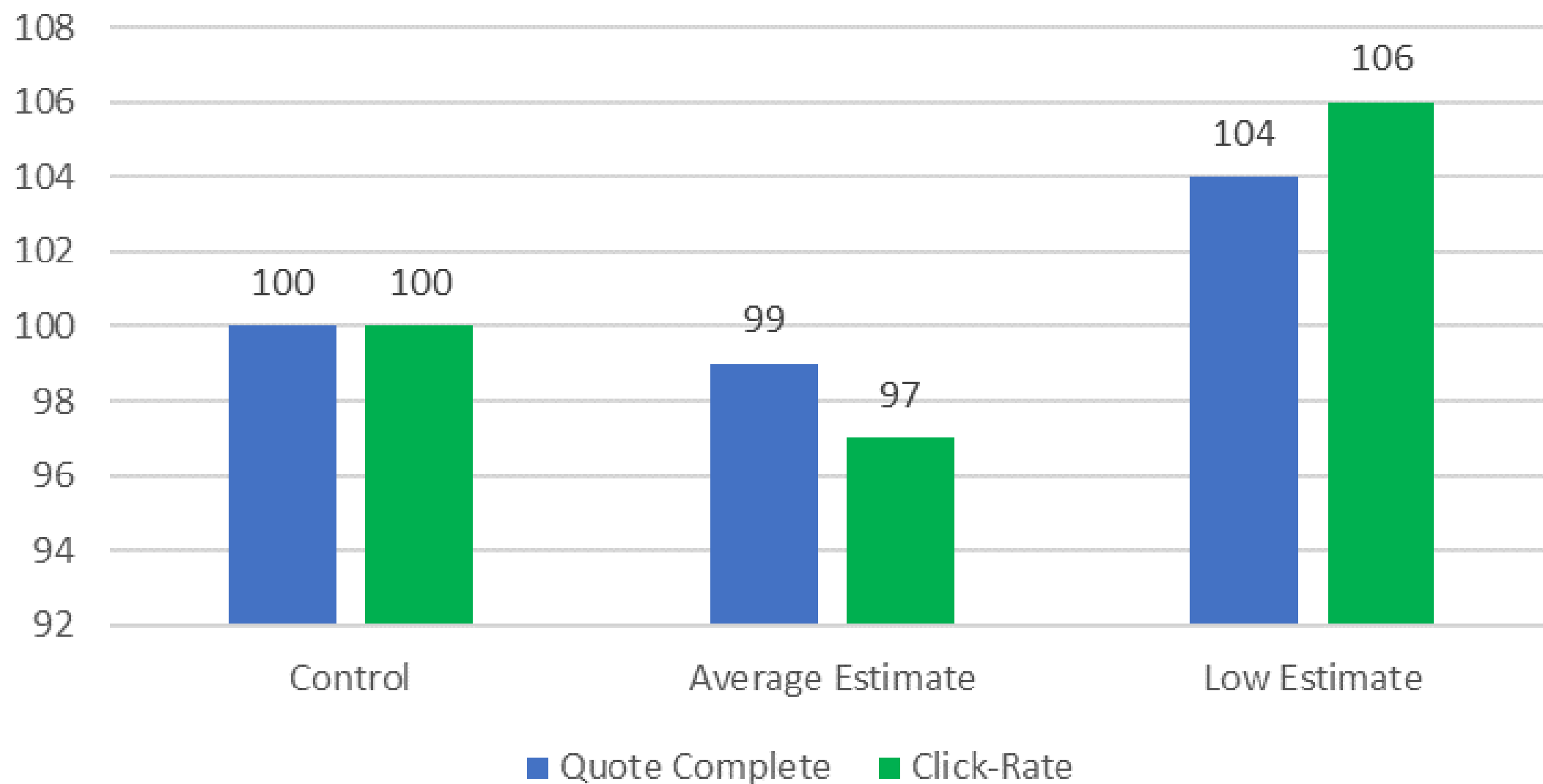
- ☐ No
- ☐ Yes

Compare.com works closely with multiple insurance companies and partners to ensure that you receive the best possible rate on car insurance. In addition to the information you provide, third-party companies use other information sources to calculate an accurate price for your insurance. These other sources include driving record(s), your claims history, a consumer report, and/or your credit history.

By clicking "I Agree and Continue", you are providing your prior express written consent to the following:

[← Back](#)[I Agree and Continue >](#)

A/B Test Results Summary



Quick Quote Test Implementation

- **Quick Quote Estimate – Low - High**
- **Location of Page – top**
- **Graphic – Static**

Lock-in a Customized Quote

Give us a few minutes and we'll compare accurate quotes from 9 carriers in your area.

[Start Comparing >](#)

Get a Quick Quote

Answer a couple of quick questions and we'll give you an idea of what you can save.

[Start Estimate >](#)

Tell us about yourself...

Date of birth

Gender

- ☐ Female
- ☐ Male

Do you currently have insurance?

- ☐ Yes
- ☐ No

Vehicle year

Vehicle body-style

Have you had any accidents,
moving violations, or claims in the
last 5 years?

- ☐ Yes
- ☐ No

Get Estimate →

Your Estimated Rate:

\$35 - \$105 per mo.

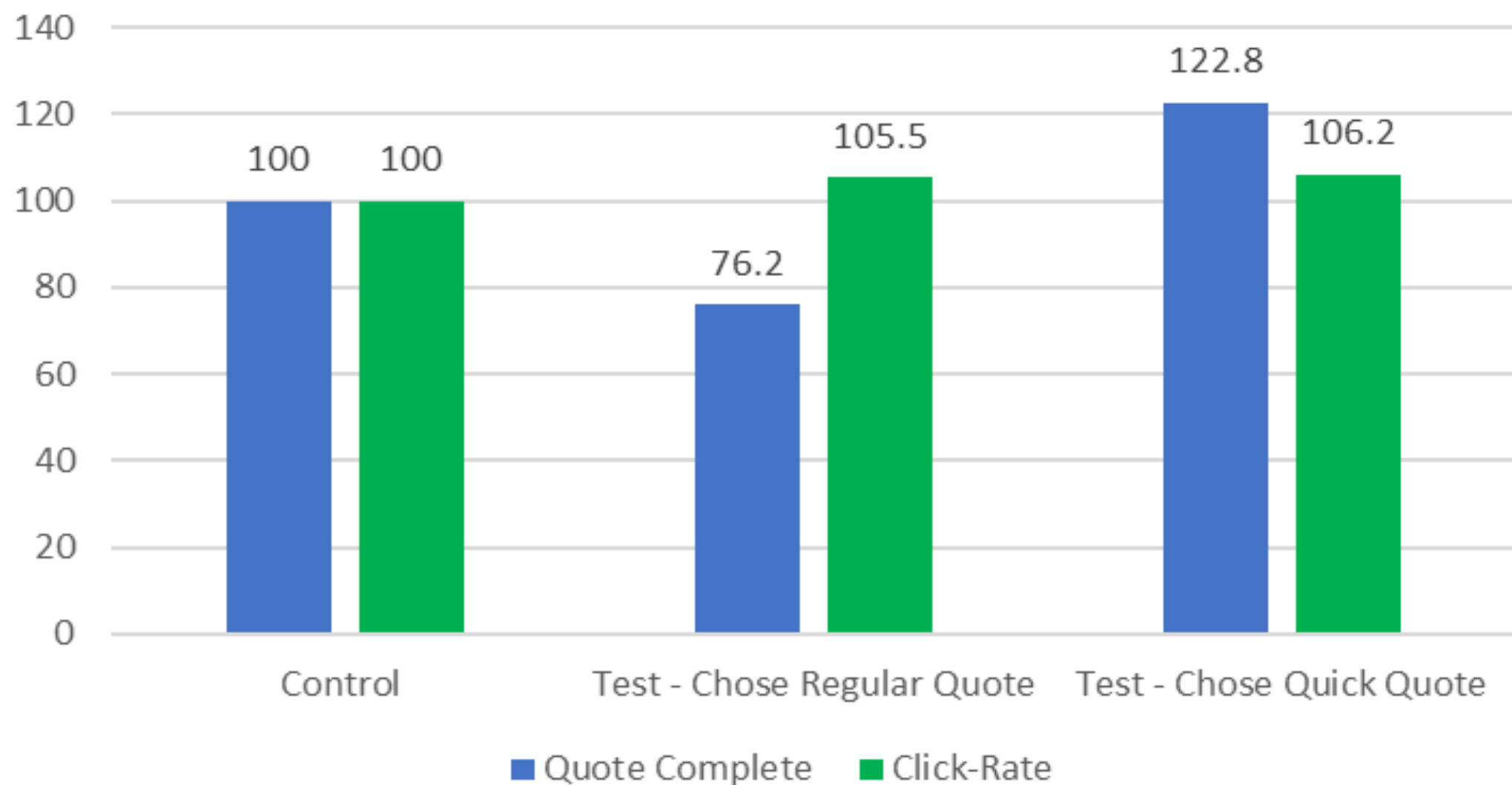
\$418 - \$1250 total for 12 mos.

Ready to get an accurate quote?

[Start Comparing](#)

*Estimated rates are calculated using a sample of the latest annual premium quotes received by similar customers in your area. Estimated rates shown are not binding rates.

Quick Quote Test Data Summary



Conclusion