

Best Tees for Golfers

Presented to Northern California Golf Association

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A New Collaborative Approach



AMERICAN
SOCIETY of
GOLF COURSE
ARCHITECTS



GCSAA
Golf Course Superintendents Association of America



NGCOA
NATIONAL GOLF COURSE OWNERS ASSOCIATION



GCBAA[®]



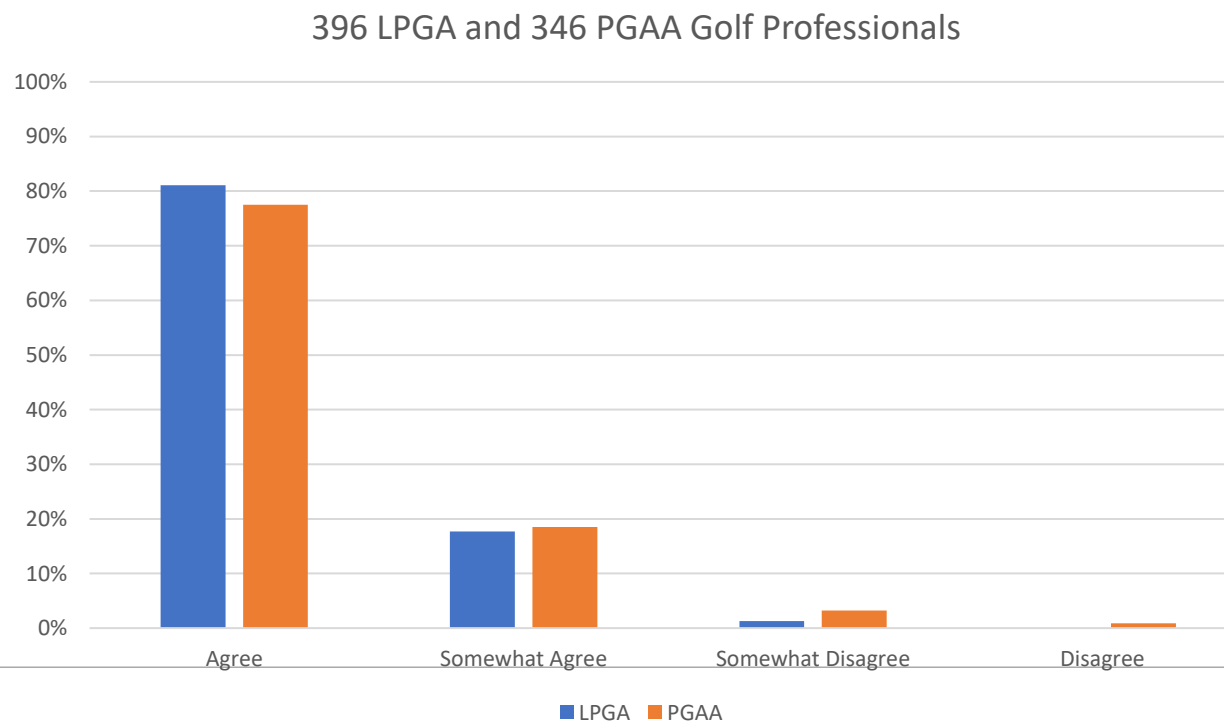
U.S. KIDS GOLF
FOUNDATION

- Golfers and facility managers were asked what they want to achieve through:
 - Golfer survey (20,000 golfers)
 - NGCOA survey
 - LPGA survey
 - PGAoA survey

What is a “Best Tee” for a golfer?

LPGA and PGAoA Golf Professionals were asked:

How do you feel about this statement: “A set of tees is a good fit for a golfer’s ability when it allows them to comfortably reach the fairway on par 4s and par 5s, reach most greens in regulation, and allows them to hit a variety of clubs on their approach shots.”



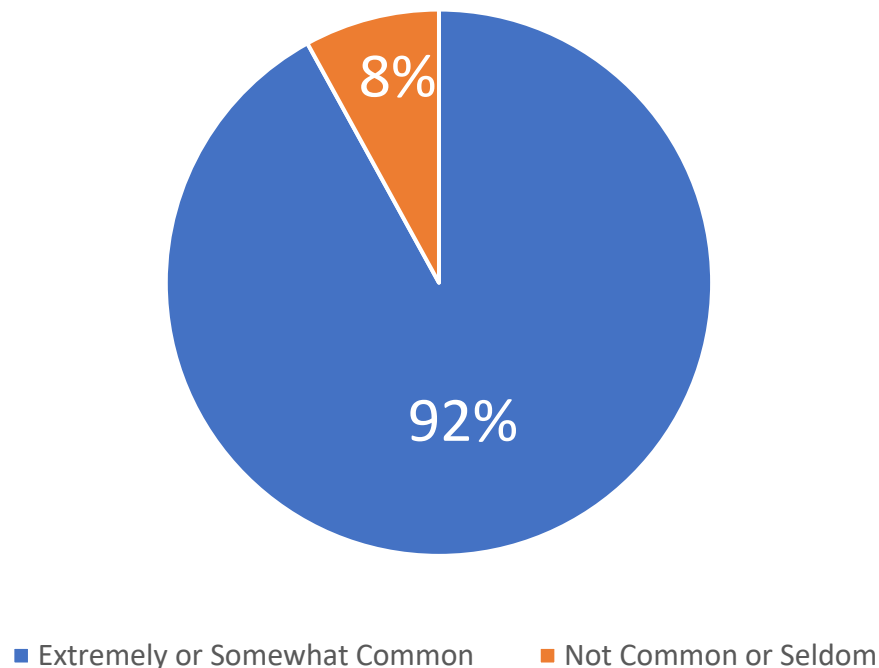
In other words, if a golfer plays a “Best Tee”

With good shots on most holes, golfers are in the vicinity of the putting green without constantly using longer clubs on approach shots, giving more opportunities for pars and some chances for a birdie!!

Do golfers play “Best Tees”?

... and while >99% LPGA and PGAoA Golf Professionals believe golfers have a better experience when they play from tees that fit their ability, when asked:

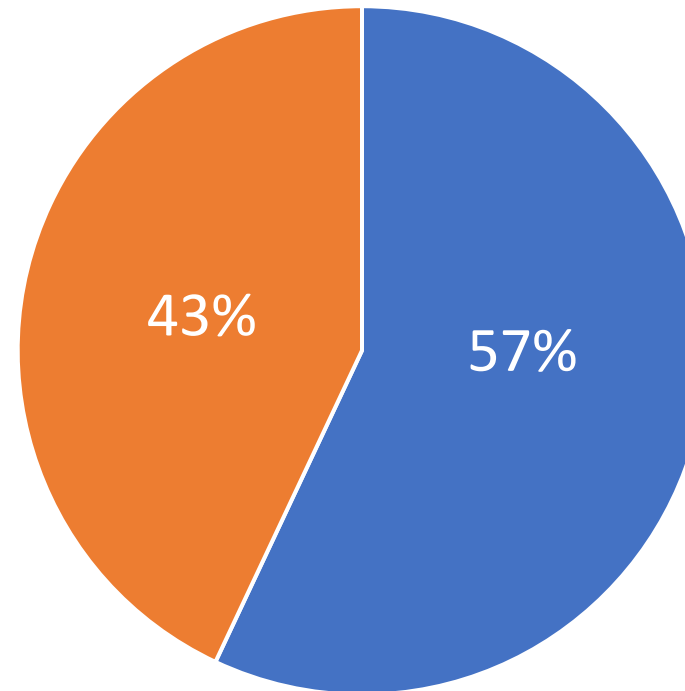
In your experience, how common is it for golfers to choose a set of tees that is too long for their ability?



Key Finding: USGA Score Posting Analysis estimates about half of men and three-quarters of women play too long a course.

Golfers admit themselves to playing too long

Do you ever feel like a course is too long for you?



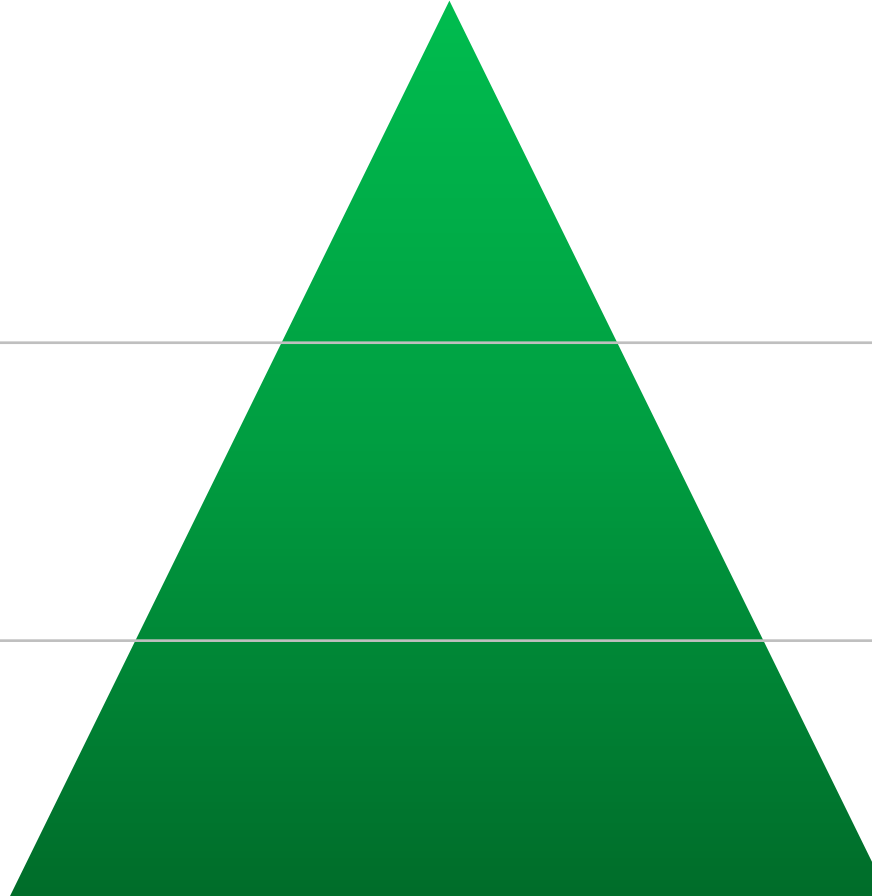
■ Sometimes or Often ■ Rarely or Never

Why don't golfers play "Best Tees"?

- Ego
- Peer pressure
- Creatures of habit

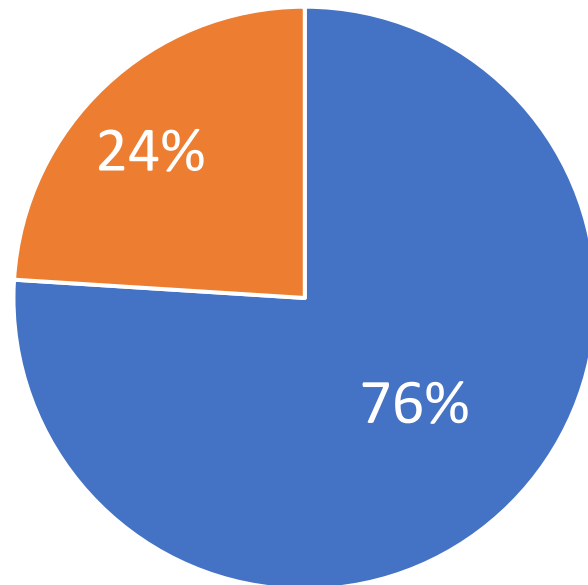
-
- Gender/Age Stigmas
 - Overestimated Ability

-
- Lack of "Enlightenment"
 - Lack of Options



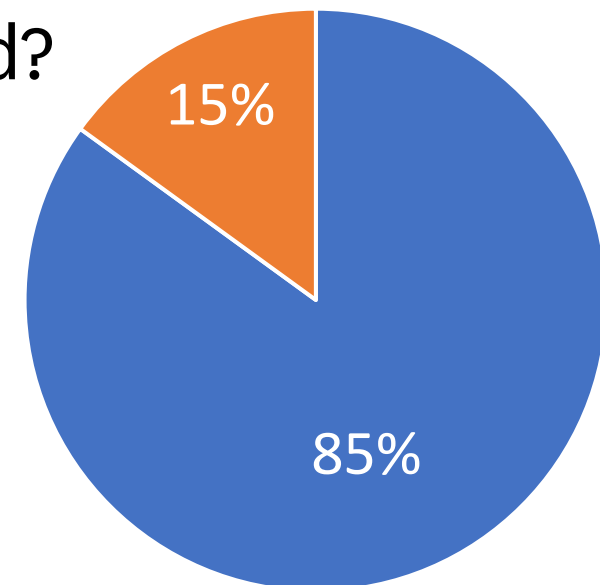
20,000 Golfers were asked:

Is it important for you to experience the designed strategies of the course from the tee you play?



■ Agree/Strongly Agree ■ Disagree/Strongly Disagree

Is it important for you to play a balance of different shots and clubs during a round?



■ Significant or Extremely Positive Impact ■ Slight or No Impact

What hole lengths do golfers prefer?

- Based on Approach Club

Hole Par	Shortest	Middle	Longest
3	Gap Wedge	6-iron	3-wood
4	Gap Wedge	6-iron	3-wood
5	Pitch Shot	9-iron	6-iron

- This confirms that golfers also fundamentally agree with the definition of “Best Tees”

Golfer Performance Data – Average Golfers

Gender	Driver	7-iron	PW
Female Distance (yds)	150	100	70
Male Distance (yds)	213	142	102
Estimate vs. Measured	+8.7%	+4.2%	0.0%

56% of golfers surveyed never measured actual hitting distance

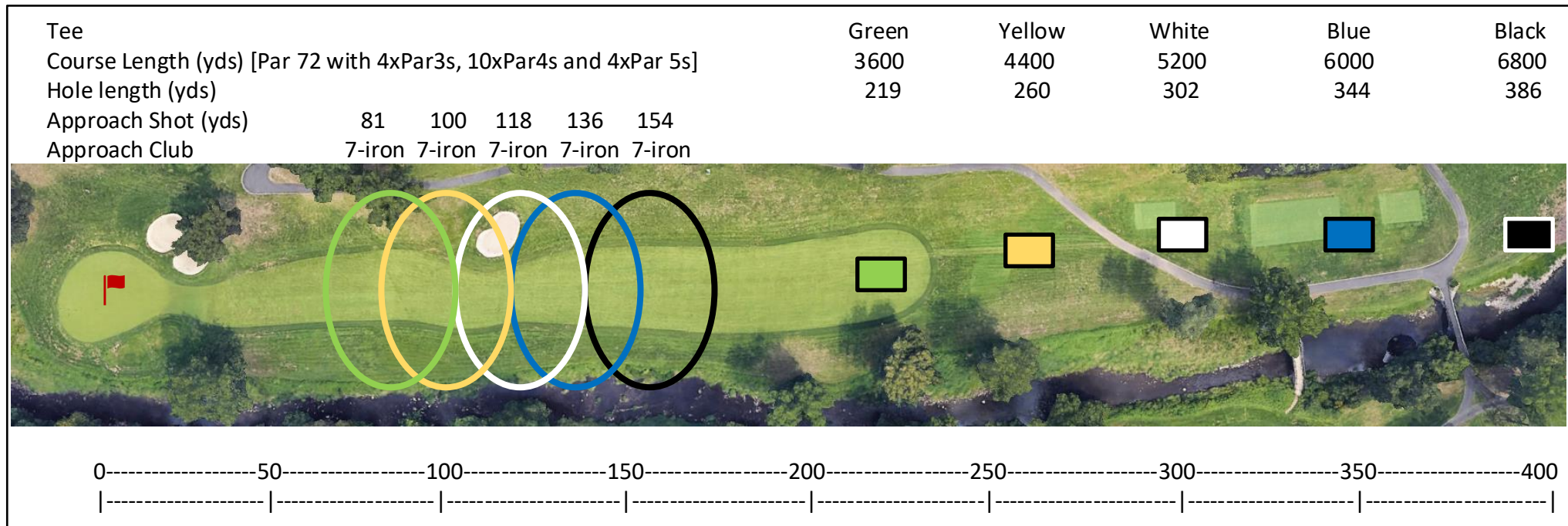
Tees to Accommodate 97% of Golfers

Physical Tee	Orange	Green	Silver	Black	Gold
Course Length (yds)	3,600	4,400	5,200	6,000	6,800
Average Par-4 Length (yds)	208	254	300	344	393

- Combo Tees can be placed between each pair of physical tees @ ~4000, 4800, 5600 and 6400 yards.
- Three physical tees and five playing options for each gender overlapping at 5200 yards

An Example Par 4 Hole – Idealized Tees

- A variety of golfer abilities from shorter to longer hitting distances are accommodated
- Does not preclude the use of shared tees or a combo-tee course that varies the approach clubs used over 18 holes



Positive impacts of playing Best Tees

For the individual golfer

- Scoring improves (They can reach greens in regulation)
- Time need to play a hole is reduced (pace of play increases)
- Golfer satisfaction improves for the individual – they have more fun shooting lower scores!

For other golfers on the course

- Less waiting (pace of play increases)
- Golfer satisfaction improves for these golfers

For the facility

- Overall, happier, more satisfied golfers – retention improved
- More rounds

**Let's Avoid
This....**

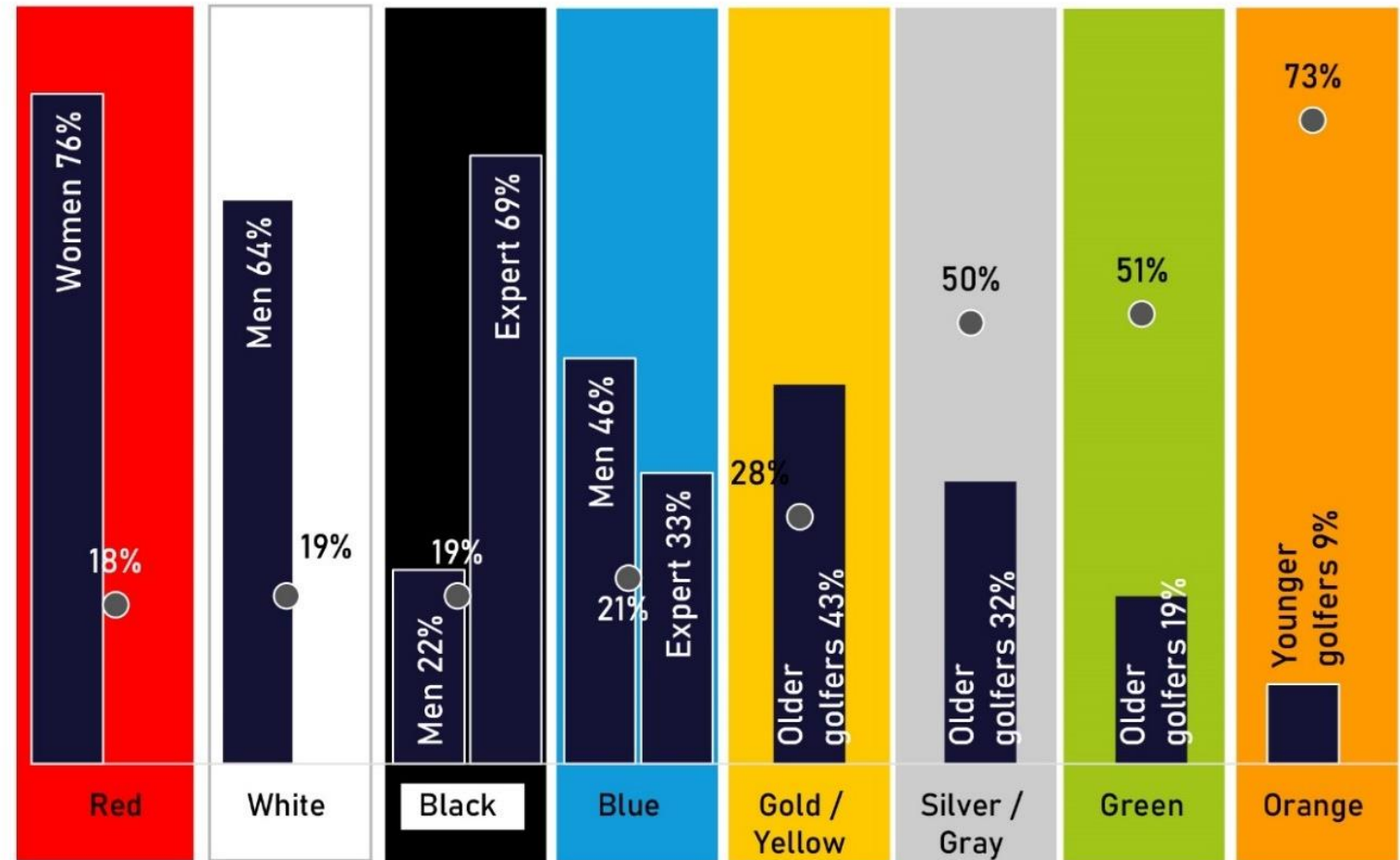


Eliminate or Minimize the Barriers to Playing a Best Tee (It's not enough to have tees rated in WHS)



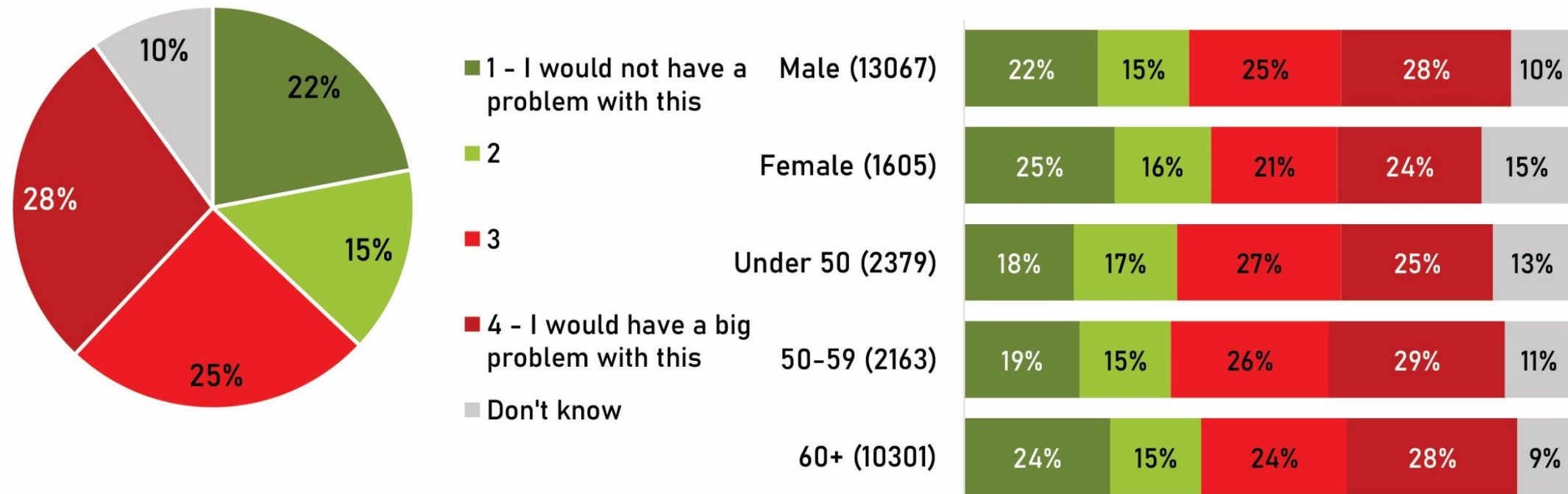
20,000 Golfers were asked:

“Do you associate certain tee colors with particular groups of golfers?”



20,000 Golfers were asked:

“How would you feel about playing from a tee that was located in the fairway, with markers at ground level?”

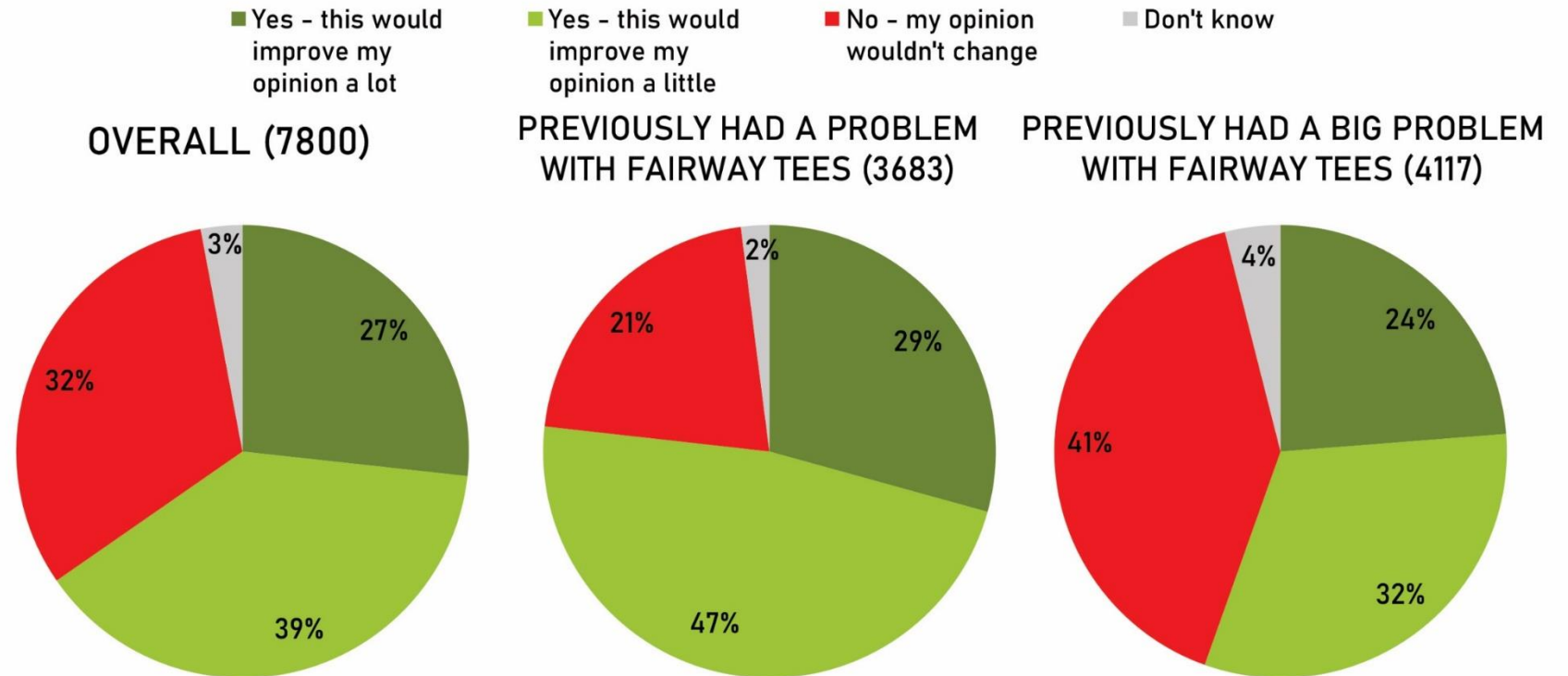


20,000 Golfers were asked:

“Would your opinion change if the teeing ground was elevated above the surrounding fairway?”

TEE SELECTION | Impact of a more formal teeing ground structure

Q. Would your opinion change if the teeing ground was elevated above the surrounding fairway into a more formal teeing ground structure?



Infographics to help engage with golfers as they choose a tee



Comprehensive system is under development

- ✓ Best Tee infographic
- ✓ Course Playability infographic
- ✓ Facility manual and Quick Start guide
- ✓ Scorecard implementation options
- ✓ Committee Competitions Tee Selection guide
- ✓ Tee Construction guide

USGA
SCORE BETTER, PLAY FASTER
Use Your 7-Iron Distance to Select Your Tee

Nicklaus Golf Club

TOTAL 7-IRON DISTANCE (Carry and Roll Yardage)	TEES
120 or less	IV
130 - 140	III / IV Combo
145 - 155	III
155 - 160	II / III Combo
160 - 170	II
170 - 180	I / II Combo
185 or more	I

AMERICAN SOCIETY OF GOLF COURSE SUPERINTENDENTS | GCSAA | NGCOA | LPGA | PGA | GCBAA | USKIDSGOLF



Average 7-Iron Distance (yards)	Recommended Tee	Course Length (yards)
More than 150	Gold	6800
140 - 150	Gold / Red Combo	6400
130 - 140	Red	6000
120 - 130	Red / White Combo	5600
110 - 120	White	5200
105 - 115	White / Green Combo	4800
95 - 105	Green	4400
85 - 95	Green / Blue Combo	4000
Less than 85	Blue	3600

For more information, contact Dave Pierce at dpierce@usga.org or send an email to the USGA Green Section at golfexperience@usga.org.

NO-NAME LAKES GOLF COURSE

Select the best tee using 7-iron distance to have more fun!

LIBERTY CORNER, NJ

USGA Tee Selector Example Scorecard - 2023


USGA

NEW AND IMPROVED

Existing Systems	New Best Tee System
Longer, hard to hit, more exaggerated clubs (driver & 5-iron)	Easier to hit, less exaggerated club (7-iron)
Linear – recommended playing length becomes very long for long hitters	Non-linear – based on golfer preferences, ability and behaviors
No adjustment – universal for all courses	Fully customized for each course
No change for Effective Playing Length factors	Can account for all EPL factors

Tee Selector Infographic


For facilities to support golfers selecting the best tee




SCORE BETTER, PLAY FASTER
Use Your 7-Iron Distance to Select Your Tee

*• SPIRIT •
HOLLOW*

TOTAL 7-IRON DISTANCE (Carry and Roll Yardage)	TEES
116 or less	Rust
130 - 140	White
145 - 155	Combo
155 - 165	Black
165 - 175	Gold
190 or more	Tournament







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Mock Scorecard

Preliminary market research showed that building it into the scorecard was preferred

Option 1: Table on the back of the card

Average 7-Iron Distance (yards)	Recommended Tee	Course Length (yards)
More than 150	Gold	6800
140 - 150	Gold / Red Combo	6400
130 - 140	Red	6000
120 - 130	Red / White Combo	5600
110 - 120	White	5200
105 - 115	White / Green Combo	4800
95 - 105	Green	4400
85 - 95	Green / Blue Combo	4000
Less than 85	Blue	3600

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NO-NAME LAKES GOLF COURSE

*Select the best tee using
7-iron distance
to have more fun!*

LIBERTY CORNER, NJ

USGA Tee Selector Example Scorecard - 2023



Mock Scorecard

Option 2: 7-iron distance built into the card

NO-NAME LAKES GOLF COURSE											
Hole	7-iron	1	2	3	4	5	6	7	8	9	Out
Gold	155	383	402	526	408	201	443	528	158	435	3484
Red	135	336	363	476	363	165	395	480	120	376	3074
White	115	295	326	423	299	120	328	415	105	342	2653
Green	100	246	277	359	250	106	279	351	91	293	2252
Blue	80	204	225	275	208	90	237	292	78	251	1860
Handicap		17	5	7	11	9	1	13	15	3	
Par		4	4	5	4	3	4	5	3	4	36
Gold/Red	145	383	363	476	408	165	395	528	158	376	3252
Red/White	125	336	326	476	363	120	328	415	120	342	2826
White/Green	110	295	277	423	250	106	328	415	105	293	2492
Green/Blue	90	246	225	275	250	106	279	292	78	293	2044

Date: _____ Scorer: _____

USGA GreenSection													
	10	11	12	13	14	15	16	17	18	In	Tot	Hcp	Net
I	402	502	186	406	423	408	300	161	528	3316	6800		
N	360	460	155	347	371	361	263	135	474	2926	6000		
I	308	422	125	316	331	325	204	120	396	2547	5200		
T	259	358	111	266	282	277	157	104	334	2148	4400		
I	217	274	95	219	233	227	115	85	275	1740	3600		
A	8	6	12	14	2	10	16	18	4				
L	4	5	3	4	4	4	4	3	5	36	72		
S	402	502	155	347	371	408	300	135	528	3148	6400		
	360	422	155	347	371	325	263	135	396	2774	5600		
	308	358	125	266	331	325	157	104	334	2308	4800		
	259	274	111	266	233	277	157	104	275	1956	4000		

Attest: _____

Playability Infographic

There is more to tee selection that purely distance!

Optional additional infographic to support golfers selecting the best tee



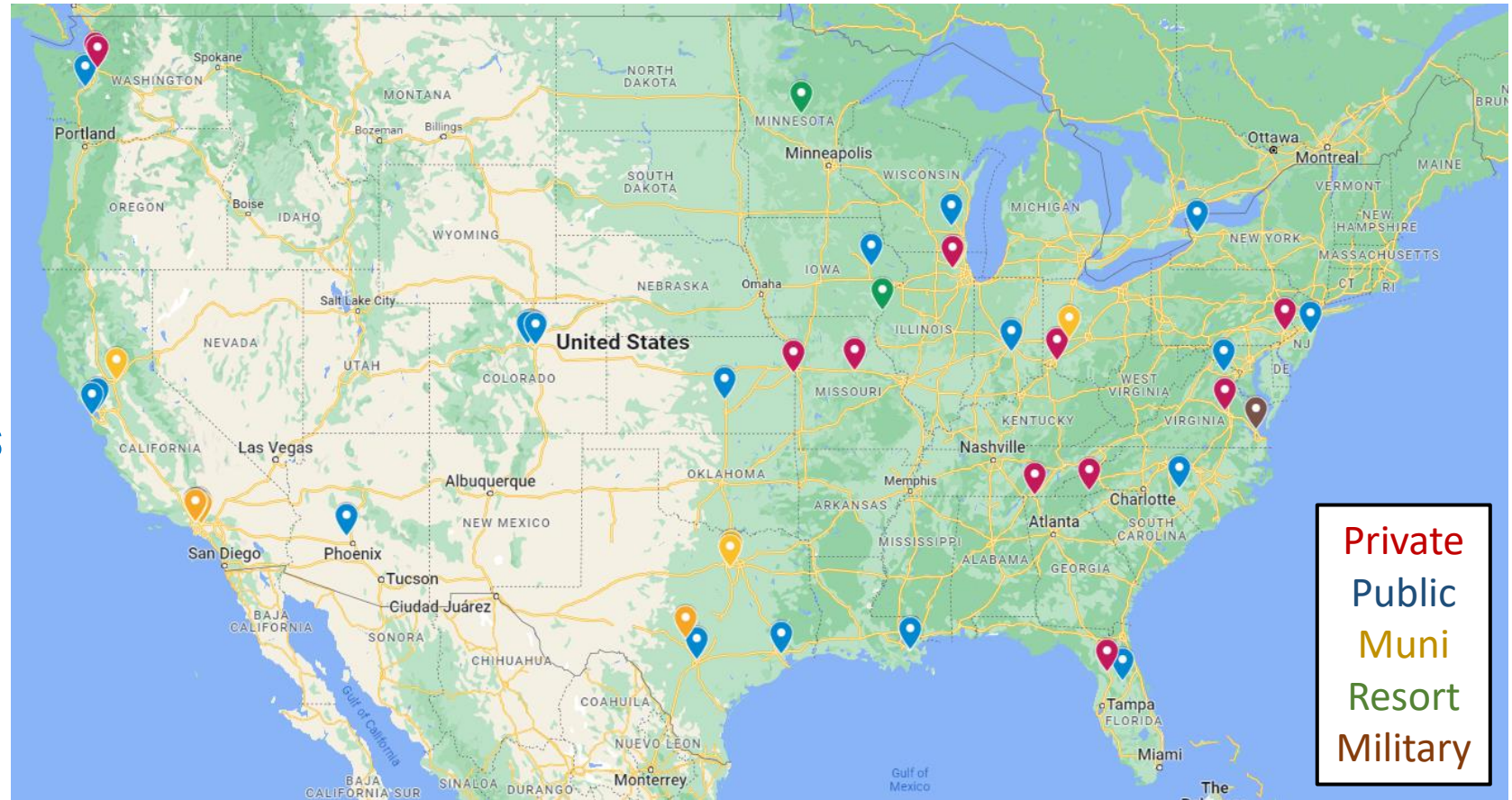
Beta-testing Enrollment

Enrollments completed in April & May

- 40 Facilities
- 60 Courses
- 1089 Holes

14	Public	24
10	Private	12
13	Municipal	21
1	Military	1
2	Resort	2
40		60

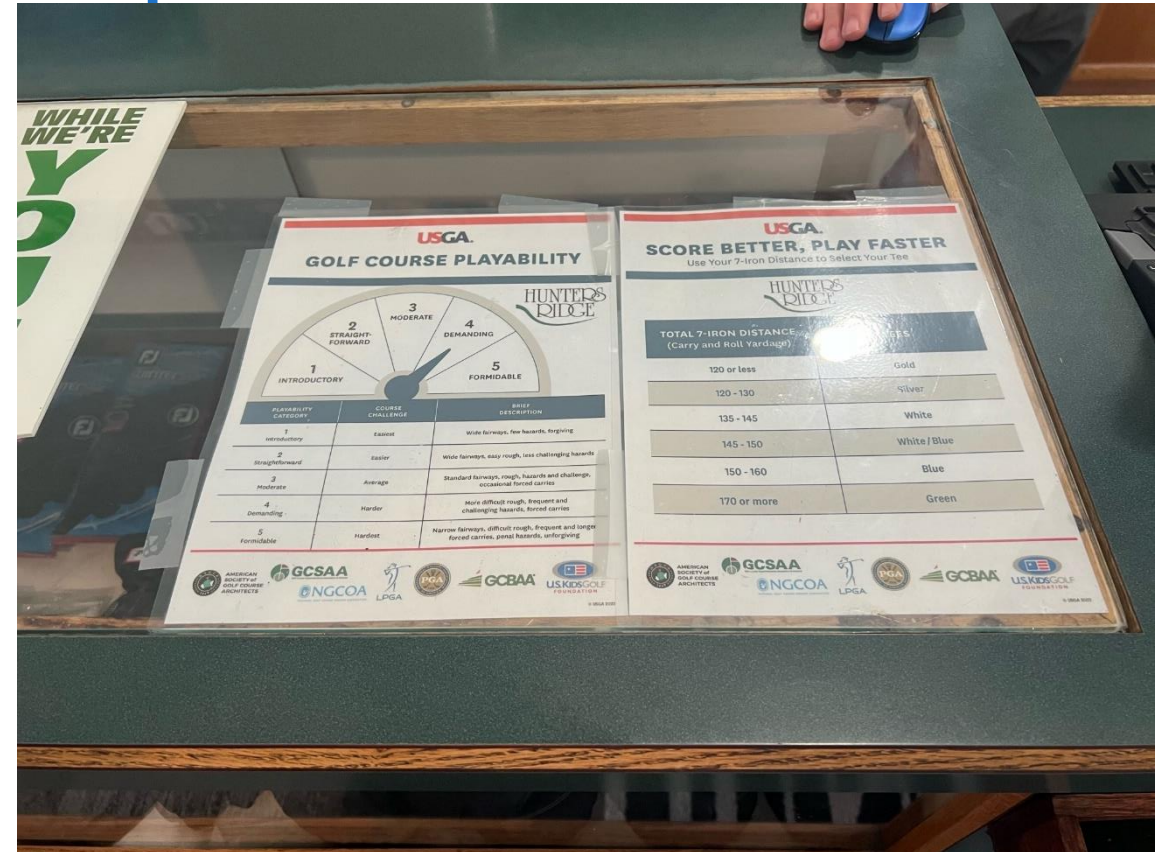
Field testing will continue through the end of September and the results will be incorporated into an updated version for 2024.



Implementation: Golf Shop



“On the Wall”

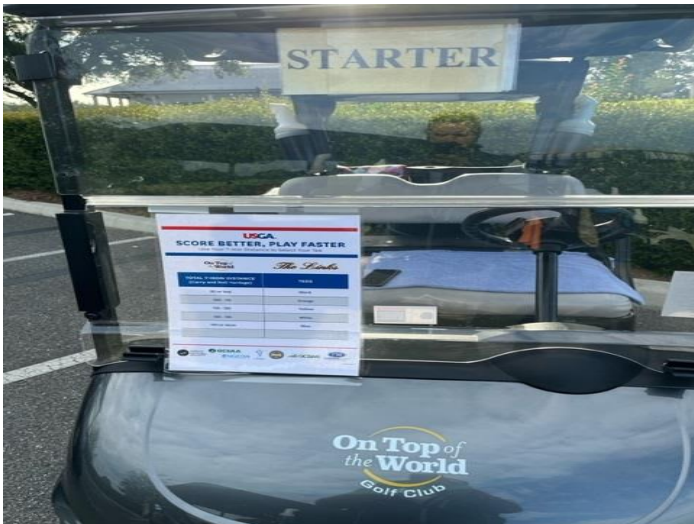


“Under the Glass”



“On the Counter”

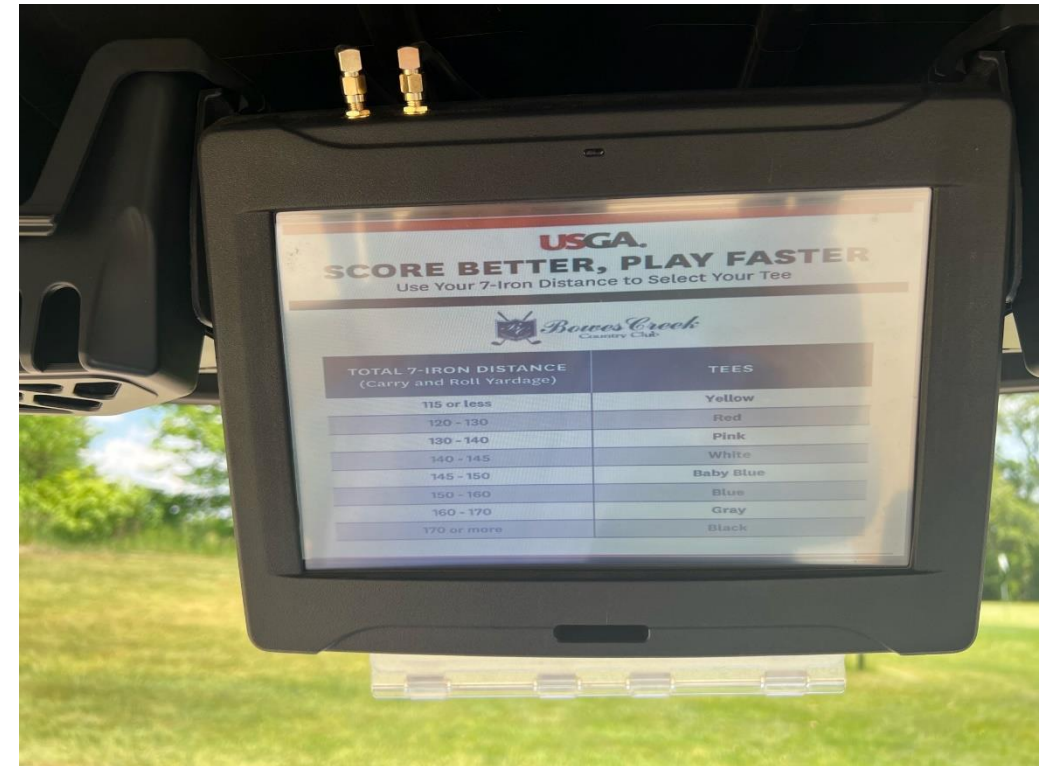
Implementation: Starter



Implementation: Range



Implementation: Golf Carts



Best Practices

- Rate all tees for all players
- Don't create barriers with course setup and presentation
- Encourage golfers to measure average 7-iron hitting distance
- Make tee recommendations part of the culture at your course based on hitting distance and course playability

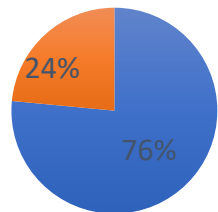
Discussion

USGA

FOR THE GOOD OF THE GAME.®

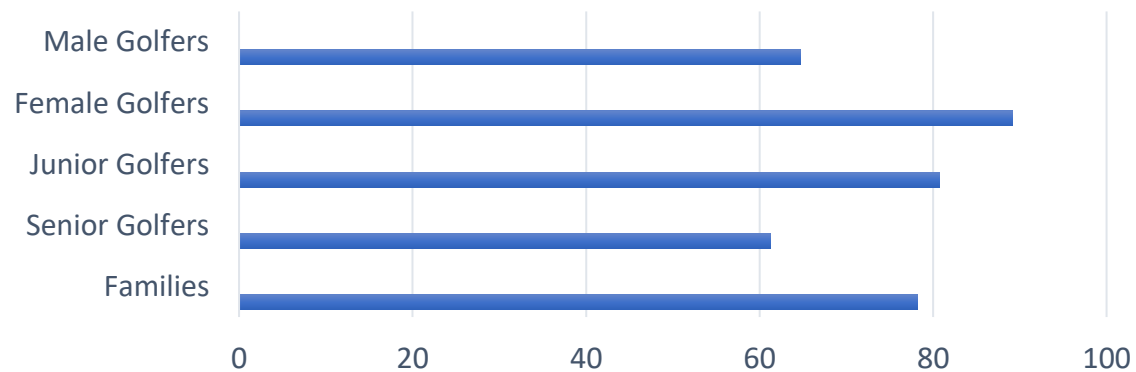
Golf Facility Goals

NGCOA Members



■ Yes ■ No

Percentage of 119 NGCOA members surveyed who would like to improve pace of play



Percentage of 119 NGCOA members surveyed who hope to attract more golfers from these groups.

Key Finding:

Golf facilities want to improve pace of play and attract more players, including those with shorter hitting distances. Additional teeing options could help them achieve these goals.

Tees on Golf Courses (in the USA)

- Median back tee is 6,518 yards
- Median forward tee is 4,952 yards
- Most courses have adequate back tee yardage for the vast majority of golfers
- Many female golfers would choose a forward tee shorter than the median if available
- Medium hitting length golfers are more apt to move up with the presence of shorter forward tees

Average Female Golfer @ 4951-Yard Course

Hole	Par	Length	Hole Length GX	Approach Club
1	4	265	Longer	5I / H
2	4	284	Longer	Fairway W
3	3	129	Longer	4I / H
4	5	405	Too Long	>6I
5	4	293	Longer	Fairway W
6	4	248	Middle	6I
7	3	131	Longer	Fairway W
8	4	290	Longer	Fairway W
9	5	401	Too Long	>6I
Out	36	2446		

Hole	Par	Length	Hole Length GX	Approach Club
10	4	286	Longer	Fairway W
11	4	270	Longer	5I / H
12	3	120	Longer	5I / H
13	5	435	Too Long	>6I
14	4	277	Longer	4I / H
15	4	300	Too Long	>3W
16	3	125	Longer	4I / H
17	5	428	Too Long	>6I
18	4	265	Longer	5I / H
In	36	2505		
Total	72	4951		

What Teeing Options Do Golfers Use?



Key Findings:

Back tees longer than 6,600 yards will be used by <8% of players.

A golfer that hits tee shots an average of 150 yards would need a course length of +/- 4,400 yards to have 6-iron as the average approach club after a good tee shot.

Only 28% of 18-hole U.S. courses offer a forward tee less than 4,600 yards.

An Example Par 4 Hole

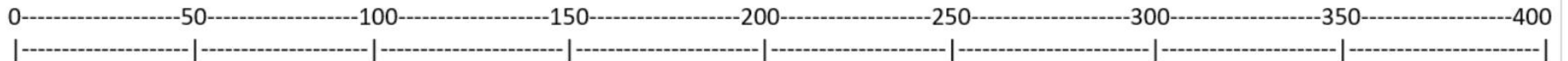
What happens when golfers play traditional tees (good tee shots)?

Tee	Red	Yellow	White	Blue
Course Length (yds) [Par 72]	5250	5775	6125	6550
Hole length (yds)	290	325	335	365
Approach Shot (yds)	76	132	147	165
Approach Club	Wedge	9-iron	>3-wood	Hybrid



What happens if golfers play “Best Tees”?

Tee		Orange	Green	Silver	Black	Gold
Hole length (yds)		229	260	302	344	388
Approach Shot (yds)	86	128	144	155		
Approach Club	7-iron	8-iron	6-iron	7-iron		

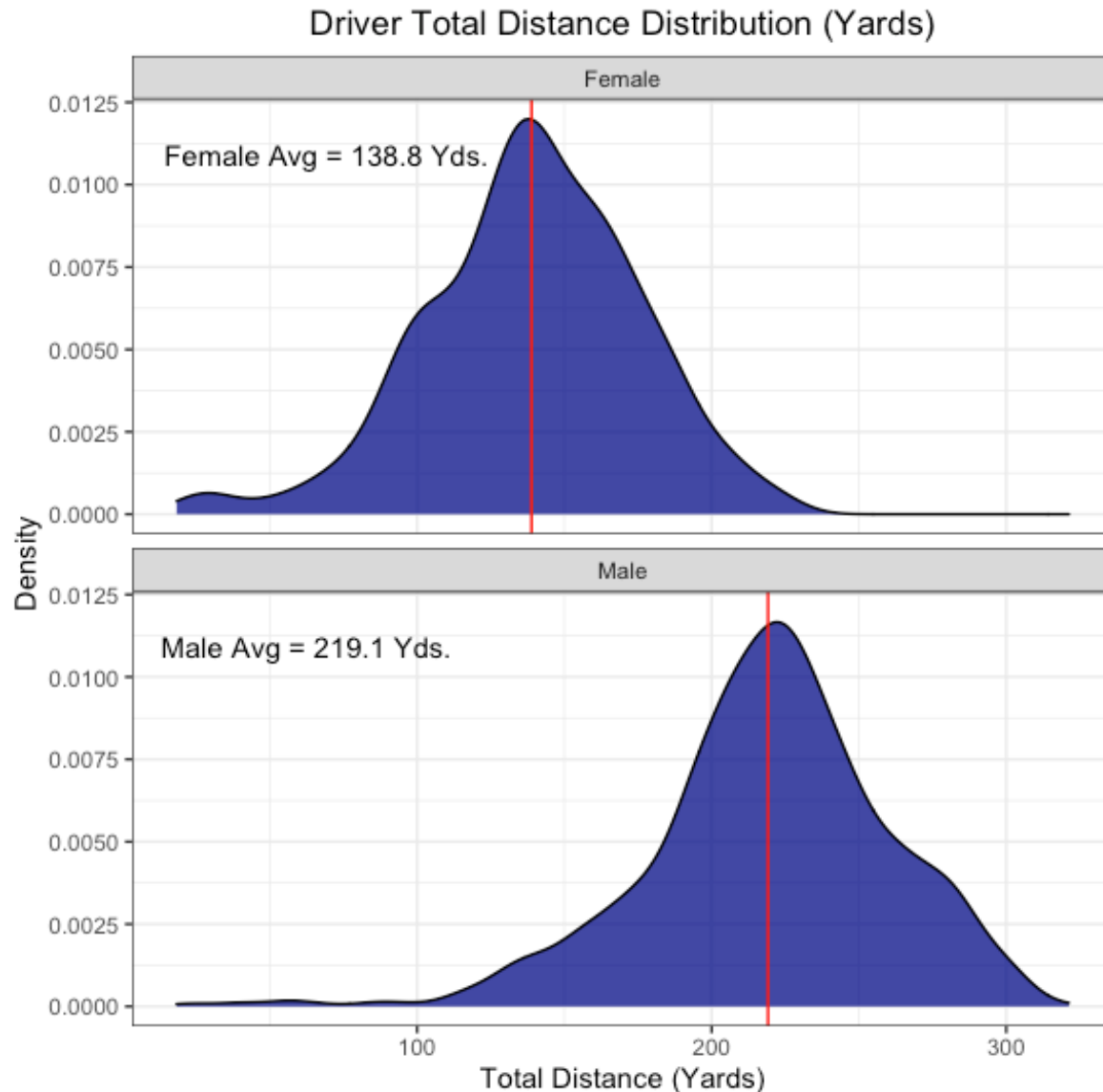


Course Use Recommendation for Facilities



Golf facilities should provide "tools" and expertise to help players objectively assess their game and make the best possible decisions on tee selection including options for golfers to more accurately gauge hitting distances.

How far do golfers hit shots?



Distribution of male and female total driving distance from a 2021 USGA golfer performance study of 300 players (234 male and 66 female) conducted in the field at several different golf facilities.

Distance Insights reported male average driving distance = 208 yards and female = 150 yards

About the Best Tee Model

Basis (Model utilizes)

- Golfer Performance (based on TrackMan measurements of Driver, 7-iron and Pitching Wedge)
- Golfer Hole Length Preferences (based on a survey of 20,001 golfers in 2021)
- Golfer Tee Selection Behaviors (based on analysis of score posting data)

Model Characteristics

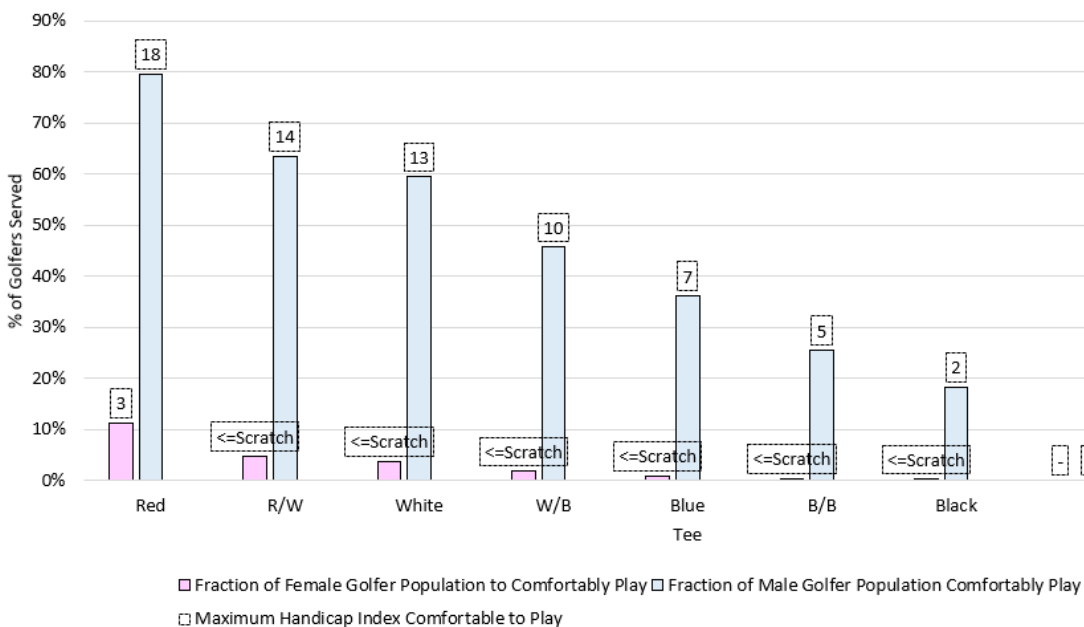
- Model is non-linear
- Model accounts for changes in course design
 - Par different from 72
 - Number of par 3-, par 4- and par 5-hole configuration differences
 - Can account for differences in Effective Playing Length of holes
 - Could account for day-to-day variations in course conditions
- Model could use multiple clubs (increases accuracy), but currently only uses 7-iron for simplicity

Model Outputs

- Calculates ideal golfer characteristics for each tee offered and portion of the population served
- Can project the playing experience and approach shot club for any golfer on any tee

GX Tee Analyzer Spreadsheet Model

1. Basic: utilizes scorecard yardage
2. Advanced: adds Effective Playing Length



Categorization of Hole Length for golfer with ideal hitting distance for overall tee playing length

Tee code:	Shortest	====> Getting Progressively Longer									
Tee name:	Red	R/W	White	W/B	Blue	B/B	Black	-	-		
Tee type:	Physical	Blended	Physical	Blended	Physical	Blended	Physical	-	-		
Total Length (yds):	5544	5971	6066	6373	6590	6860	7077	-	-	Par	
										72	

Hole	How Golfers will Perceive each Hole - Relative Hole Length Classification								Total	Par	
1	Longer	Longer	Longer	Middle	Middle	Middle	Middle	-	-	4	
2	Middle	Middle	Middle	Middle	Middle	Middle	Shorter	-	-	5	
3	Longer	Longer	Longer	Longer	Longer	Middle	Longer	-	-	4	
4	Middle	Middle	Middle	Middle	Middle	Middle	Middle	-	-	4	
5	Middle	Longer	Longer	Middle	Longer	Longer	Longer	-	-	3	
6	Too Long	Longer	Longer	Middle	Middle	Middle	Middle	-	-	5	
7	Middle	Middle	Middle	Middle	Longer	Middle	Longer	-	-	4	
8	Shorter	Middle	Middle	Longer	Longer	Longer	Longer	-	-	4	
9	Middle	Longer	Middle	Longer	Longer	Middle	Longer	-	-	3	
										Front	36

10	Shorter	Shorter	Shorter	Shorter	Shorter	Middle	Middle	-	-	5	
11	Middle	Middle	Middle	Middle	Middle	Middle	Middle	-	-	4	
12	Middle	Middle	Middle	Middle	Middle	Longer	Middle	-	-	5	
13	Middle	Middle	Middle	Middle	Longer	Longer	Longer	-	-	3	
14	Too Long	Longer	Longer	Longer	Longer	Longer	Longer	-	-	4	
15	Longer	Longer	Longer	Longer	Longer	Middle	Longer	-	-	4	
16	Middle	Middle	Middle	Longer	Longer	Longer	Longer	-	-	3	
17	Longer	Longer	Longer	Longer	Longer	Longer	Longer	-	-	4	
18	Middle	Longer	Middle	Longer	Middle	Middle	Middle	-	-	4	
										Back	36

Chart Area