ACUSHNET COMPANY

August 2, 2021

Mr. John Spitzer
Managing Director, Equipment Standards
USGA
77 Liberty Corner Road
Liberty Corner, NJ 07938

Dr. Steve Otto
Executive Director – Chief Technology Officer
The R&A
St Andrews
KY16 9JD, UK

Re: Response to February 1, 2021 Notice and Comment

Dear John and Steve,

This document contains Acushnet Company's response to the Notice and Comment (the "NC's") issued by the USGA and R&A (collectively, the Governing Bodies ("GB's")) on February 2, 2021. Acushnet submits this response as a concerned and responsible stakeholder and in concert with our long-standing commitment to act in the best interests of the game.

As a foundational matter, we reiterate that our review of all the materials published by the GB's related to the Distance Insights Project (the "DIP") have led us to conclude that, although the research was extensive, (i) the research does not support the conclusion that hitting distance is hurting or will hurt the game and (ii) there is no demonstrated need to issue the NC's.

We have previously submitted a document that provides a more detailed analysis of the DIP research in support of our conclusions. That submission titled "Acushnet Response to Distance Insights Project Report, Conclusions and Library (Rev. 4)" dated as of 4/22/21 is attached and incorporated by reference as Attachment B. As the NC's are specifically referenced as a subject matter in and an outcome of the DIP documents, Attachment B is a relevant and integral part of the Acushnet response.

We believe that adoption of the three NC proposals will disrupt an increasingly healthy game – creating uncertainty, confusion, complexity and cost, while rolling back equipment performance that will negatively impact all levels of play.

We have the following more specific comments that apply to all three of the NCs:

- The game of golf has always evolved and continues to evolve. We do not see evidence that distance is harming or will in the future harm the game.

- There is a generational opportunity to grow and change the face of the game, which opportunity is endangered by equipment standards that reduce the performance of golf equipment.
- All stakeholders have an opportunity and obligation to participate in this growth potential. Adoption of the NC proposals will create disruption and be detrimental to the game's growth prospects with emerging golfers and discourage dedicated golfers, as the game becomes even more difficult to play.
- Equipment innovation and technology is an integral part of the game's history that has contributed to the game's enduring appeal.
- Equipment is already highly regulated and the rules currently in place are very effective in accomplishing their intended purpose.
- The GB's have supported firm and fast golf courses, which conditions promote increased distance. This seems incongruous with asserting that distance is a problem.
- Concern has been raised that distance will continue to increase with more athletic players. However, physics will prevail - USGA research indicates that there are diminishing returns of overall distance with increasing clubhead speed. (Steve Quintavalla – 2006, 2011, 2021)
- Golf courses and their designs have always evolved and prompted changes in player swing technique, course strategy and equipment choices. Further equipment regulation may stifle the healthy evolution in golf course innovation.

As an additional preliminary matter, two of the three topics chosen for NC's have been characterized by the GB's as updates to equipment testing processes. However, as demonstrated in our comments below, both the "Update on testing method for golf balls" and the "Change to testing tolerance – Characteristic Time" proposals would result in performance roll backs for golf balls and golf clubs, respectively, that will impact all players and will be significantly disruptive to the market.

"Update on testing method for golf balls"

As a preliminary comment, we note that the use of optimized launch conditions ("OLC"), as a part of the ODS test protocol, was proposed by the GB's in 1995. That proposal was thoroughly researched and discussed from that time through 2003, when the USGA made the decision not to implement an OLC protocol and, instead, to update the ODS protocol using actual launch conditions ("ALC"). As discussed below, the reasons advanced for rejecting the use of OLC then, still remain valid today.

- Use of OLC and a new roll model is essentially an entirely new test method, not a "tightening up" or improvement of the existing ODS protocol.
- Use of the OLC disregards actual ball launch and spin, divorcing aerodynamics from golf ball construction – generating some anomalous test results.

- GB technical documentation suggests that use of OLC will increase testing error.
- Use of OLC results in golf balls being tested at theoretical launch conditions not replicated by players – not even elite players.
- No player launches at 15 degrees and 2200 rpm.
- We are aware of only 12 players on the PGA Tour currently launching between 11.5 and 13.5 degrees and less than 2300 rpm. The median distance rank for those 12 players is 128th.
- Of the top 10 players in driving distance on the PGA Tour (YTD) the average launch angle is below 10 degrees with spin above 2500 rpms, which is much closer to the ALC used.
- OLC, combined with the new role model, adds several yards on average to each ODS test result.
- If adopted, a significant number of golf balls would become non-conforming under the new protocol. Most others would be too close to the limit to be produced to their current specifications.
- Adoption of OLC would require manufacturers to redesign products with scaled back distance performance attributes – a roll back.
- Industry cost to redesign and retool would be tens of millions of dollars and take many years to implement.
- Adoption of OLC will stifle golf ball innovation - complicating and increasing the time and expense associated with the golf ball design and testing processes.
- Market disruption would be substantial.

"Change to testing tolerance – Characteristic Time"

- Manufacturers having been designing and manufacturing product within the current test tolerance for over 20 years, with the acquiescence of the GB's. The industry and consumers have come to rely on that specification, including the professional tours where driver testing by the GB's has accelerated in recent years.
- A very substantial percentage of driver product currently in the market or in the design process would be non-conforming if the test tolerance proposal is adopted.
- Manufacturers would be required to redesign most if not all driver products. That cost would be in the tens of millions of dollars and would take several years to complete.
- The newly designed product would be slower than the current product. Our testing shows a few yards lost on average.
- Most driver purchasers are now fitted into new product using launch monitors to compare new product with their current product.

- Although the ball speed and yardage loss may seem small, players at all levels want to know whether the product is faster or slower (not how much) – if slower, we believe that they won't buy.
- We estimate the current worldwide driver market is approximately $1.5 billion at retail.
- We, in consultation with golf professionals and retailers, believe that at least 50% of the driver market would be lost in the first year of implementation of this proposal. We also believe that it would take several years to restore this market and consumer confidence.
- This would result in substantial market disruption, confusion for players at all levels and significant financial loss to PGA Professionals, fitters, retailers and manufacturers.

"Club length – reduction to 46 inches available as Model Local Rule (MLR)"

We have separately submitted our comments to the GB's on this proposal by email on July 10, 2021. A copy of those comments is attached and incorporated by reference as Attachment A.

We would like to highlight a couple of those comments for the completeness of this document:

- The GB's are on record as supporting a single set of rules.
- Acushnet has publicly supported that GB position and believes that a single set of rules "is one of the great attributes that really binds us to the game and allows us to play the same golf courses, under the same rules, with the same equipment".
- A Model Local Rule ("MLR") used in the equipment context is bifurcation on a local level, which introduces all of the disruption, confusion, complexities and costs associated with multiple sets of rules. The increases in development, production and selling costs will result in higher prices to golfers.
- We do not believe that equipment related MLR's are in the game's best interest and believe that they should be reserved for playing rules, not for setting equipment standards.

In summary, we believe that the GB's are inequitably singling out the equipment industry to solve a problem that does not exist. As noted in Attachment B, the GB's data does not support the conclusion that current distance is or that future potential distance will be harmful to the game. Further, even if there were a problem, the small gain potentially achieved by the proposed measures is far outstripped by the harm to the manufacturing and retail communities, not to mention the potential disruption to the momentum golf is currently experiencing. And what about the golfer? How are golfers, regardless of what level, going to respond to a roll back in the performance of the equipment that they depend on for the enjoyment of a still very difficult game?

ACUSHNET COMPANY

We see golf as a tripartite endeavor. The playing field (courses), the player (golfer) and the implements of play (equipment). Each of those components has developed their own ecosystems and commercial industries, that all come together as a game. Each needs to be healthy and in balance with the others for the game to thrive and evolve for future generations. We believe that is currently the case. If the NC proposals are adopted, the equipment ecosystem will sustain a severe and prolonged state of being unhealthy. We believe that will damage the game, possibly irreparably and implore you not to go down that path.

We also believe that issuing NC's and Areas of Interest ("AI") covering the same equipment, if acted on separately and at different times, would greatly compound the cost, complexity and disruption issues described above.

Acushnet has historically and intends to continue to conduct itself in the best interests of the game. It is in our DNA and it is also in our own commercial interest. In addition, we have been a cooperative partner with the GB's and other stakeholders in the dialogs and processes around equipment regulation and other issues. We look forward to continuing the exchange of information for our mutual education and understanding. However, we strongly believe that rather than proceeding with the current NC and AI process, there should be an opportunity for all stakeholders to convene together to have a meaningful examination and dialog around the DIP and issues raised in the NC's and the AI's. This submission is presented as a further effort to promote that engagement.

Respectfully,

David Maher
President and Chief Executive Officer
Acushnet Company

ATTACHMENT A

Club length – reduction to 46 inches available as Model Local Rule (MLR)

Acushnet Commentary on Shaft Length Reduction N&C:

- As explained by the Governing Bodies (GB's) this initiative is designed to be a pre-emptive move to prevent the proliferation of shaft lengths beyond 46" in advance of Elite Players testing and training to add speed/distance through shaft length.

- The proposed new limit on length from 48"-46" will have a minimal impact on the WW tours based on the information in our player database. There is a small number of players with 46" and there is a limited number of players currently testing shafts with a length more than 46".

- Our research and findings concur with that presented in DIP in that the reduction from 48" to 46" will result in speed/distance reductions of 3-4 yards.

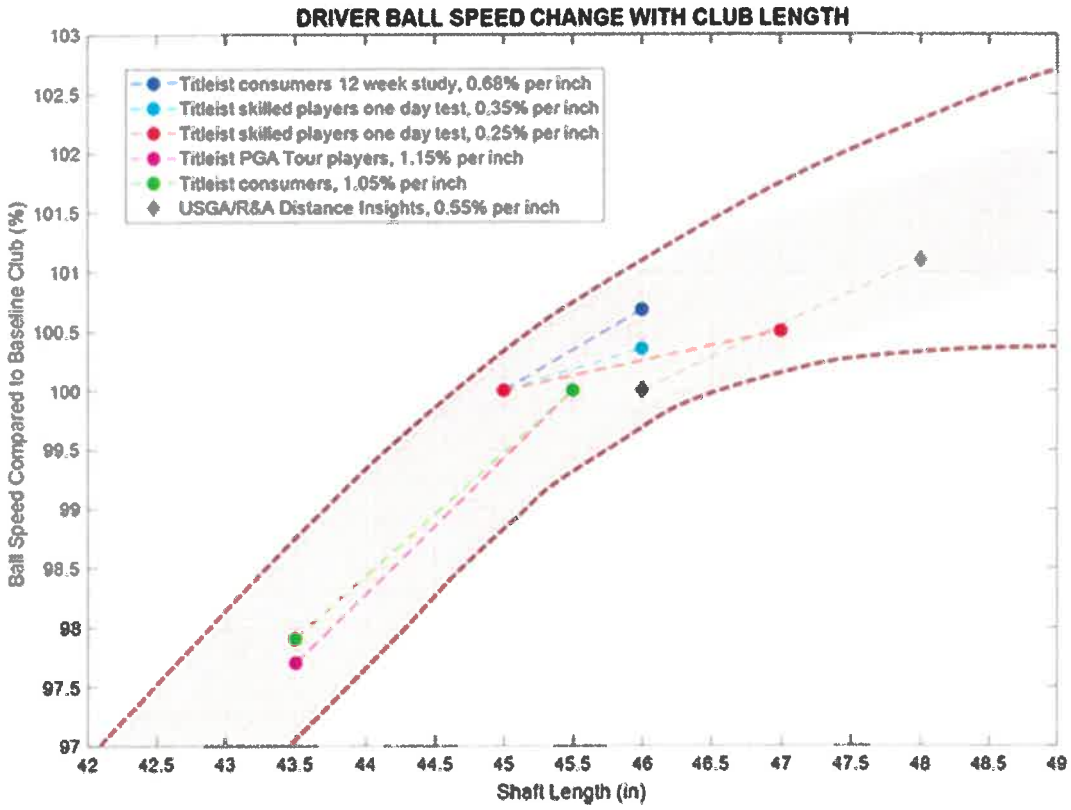
- The research indicates that the length-speed relationship is not linear. There is increased impact of the length-speed ratio as lengths get shorter. (see fig. below)

- The research indicates that the speed-distance reduction through reduced length is more significant with the elite or highly skilled community.

- There is a need for education and communication on shaft length measuring standardization. We request that the GB's establish a measurement standard.

- As a result of the research findings we believe that shaft length needs to remain an area of interest (AOI) within the Distance Insights Project.

- It is important to note that any reductions or caps shorter than 46" will result in disruption to the marketplace as all golfers (depending on the length) will experience less speed and a reduction in distance (rollback).



Acushnet Commentary MLR-Bifurcation within the N&C:

- The Governing Bodies are on record in supporting a single set of rules.
- Acushnet continues to believe that Unification of the Rules **"is one of the great attributes that really binds us to the game and allows us to play the same golf courses under the same playing rules with the same equipment."**
- Acushnet has publicly supported the position of the GB's (Case for Unification, 2013)
- Given the position of both the GB's and Acushnet we are concerned by the proposal which introduces the MLR, in this instance to address the shaft length limitation.
- The introduction of an MLR introduces a different set of equipment standards with the recommendation that this be for use in competitions limited to highly skilled players.
- This represents bifurcation on a local level which introduces all the disruption, confusion, complexities, and costs associated with multiple sets of rules.
    - Differing equipment standards based on the golf course or the level of skill will severe one of the great attributes of the game which has unified the game through history.

- At what levels would there be different equipment standards- Juniors, College, Open Championship qualifiers, Monday qualifiers, Q Schools, County/State/City/Regional championships?
- Golfers would be required to purchase different equipment for different courses or at different calibers of competition. The cost to golfers would escalate substantially.
- The design and manufacturing of equipment will become more complex and costly as product is developed on parallel paths. There will be OEMs that will elect to not make equipment at the elite level due to cost of development and lower return.

- It is the Acushnet position that MLR/Bifurcation is not in the game's best interest and should not be a consideration for this shaft length proposal or in any other areas of interest pertaining to equipment. MLR should be reserved for playing rules, not for equipment standards.

- Should a reduction in the shaft length to 46" (or shorter in the future) be proposed it is the Acushnet position that this should be phased in over time. The time is dependent on the level of disruption in marketplace.

- Any change in the shaft length regulation be implemented as a cap or maximum as opposed to through an MLR/Bifurcation.

ATTACHMENT B

ACUSHNET COMPANY

Acushnet Response to Distance Insights Project Report, Conclusions and Library

As of 4/22/21

(Rev. 4)

Introduction

This document represents Acushnet's preliminary views regarding the documents that the USGA and R&A (collectively the Governing Bodies ("GB")) have published in relation to the Distance Insights Project ("DIP"). This document does not specifically respond to the content of the Notice and Comment ("NC") or the Areas of Interest ("AI") documents published by the GB's on February 1, 2021. Rather it reviews the research and conclusions that the GB's have published in relation to the DIP which purport to support the actions being recommended by the GB's in the NC's and AI's.

Acushnet's review of those materials, as well as its own research, have led us to conclude that (1) the DIP research, although extensive, is subject to question in many respects, (2) the research does not support the conclusions that the GB's have reached regarding the impact of hitting distance on the game of golf and (3) as a result, there is no foundation for the GB's to issue the NC's and AI's.

Acushnet is currently a leading manufacturer and seller of balls, clubs, shoes, gloves, apparel and gear throughout the world. It holds the #1 position in sales in several of those categories individually. Acushnet sells to over 37,400 golf retail locations worldwide. Acushnet has always taken with utmost seriousness its obligation to be a steward of the game and its commitment to work cooperatively with the GB's and other stakeholders to further the long-

term best interests of the game. It is in that spirit that we provide the following comments.

Hitting distance in the game of golf is an age-old subject of conversation and debate among golf's stakeholders. In recent years those conversations have been inclusive of all stakeholders and generally have yielded sufficient consensus to keep most participants on the same page regarding golf's future. However, the issuance of the NC's and AI's, and the rollback of equipment inherent in those proposals, has the potential to fracture that consensus and imperil golf as we know it. We believe that the proposals, if enacted, will have serious negative disruptive consequences for the game. That is particularly true given the recent surge in interest and participation in the game. As a stakeholder, we have a responsibility to closely examine the basis for the GB's proposed action and have found substantial cause for concern.

This document will focus on several key elements of the GB published conclusions and provide a critique of the research that they are based on – primary focus is on the Distance Insights Report published on 2/4/20 (the "Report"). We do not intend to address all of the research that was published, but believe we have identified enough areas to demonstrate that the actions proposed in the NC's and AI's are not supported as necessary or desirable for golf. In essence, we do not believe that the research has identified or defined a problem that requires a solution.

With that said, below are the specific areas that will be addressed. Each of these areas has been identified in the GB's documents as one that is driving the need for action at this time:

1. Does each generation of golfers hit the ball longer than the prior one?
2. Is there a "continuing trend" of lengthening golf courses?
3. Is there an imbalance between distance and other elements of the game, such as accuracy and shotmaking?
4. Is distance having a negative impact on golf course sustainability?
5. Is distance driving up costs for golf courses and golfers?
6. Is distance having a negative impact on the time it takes to play?
7. Is golf equipment responsible for any recent distance increases?
8. Is hitting distance a problem or a threat to the game?

As a general matter, we would first like to call to your attention several of the concerns that we have with the research itself. These concerns run through many of the documents published in the Distance Insights Library and call into question the conclusions derived from them. They are as follows:

a. Much of the data is derived from older research and is not sufficiently current to support identification of current trends.

b. For many of the studies there is i) no identifying information regarding by whom or when the study was conducted, ii) no selection criteria identified and/or iii) questionable sample sizes.

c. Several studies mix collection processes and participants.

d. Many studies yield subjective rather than objective (quantitative) conclusions.

e. In those studies that provide quantitative data, it often does not support the narrative conclusion presented.

f. For many of the studies, there are caveats published which put the efficacy of the data and conclusions into question.

Findings

1. Does each generation of golfers hit the ball longer than the prior one?

The data presented in the Report clearly shows a plateau in driving distance, both at the recreational and elite golfer levels.

Recreational Golf: As shown in Figure 1, driving distances for the recreational golfers studied, across all handicap levels, have risen minimally since 1996 and have been generally stable since the early 2000's.

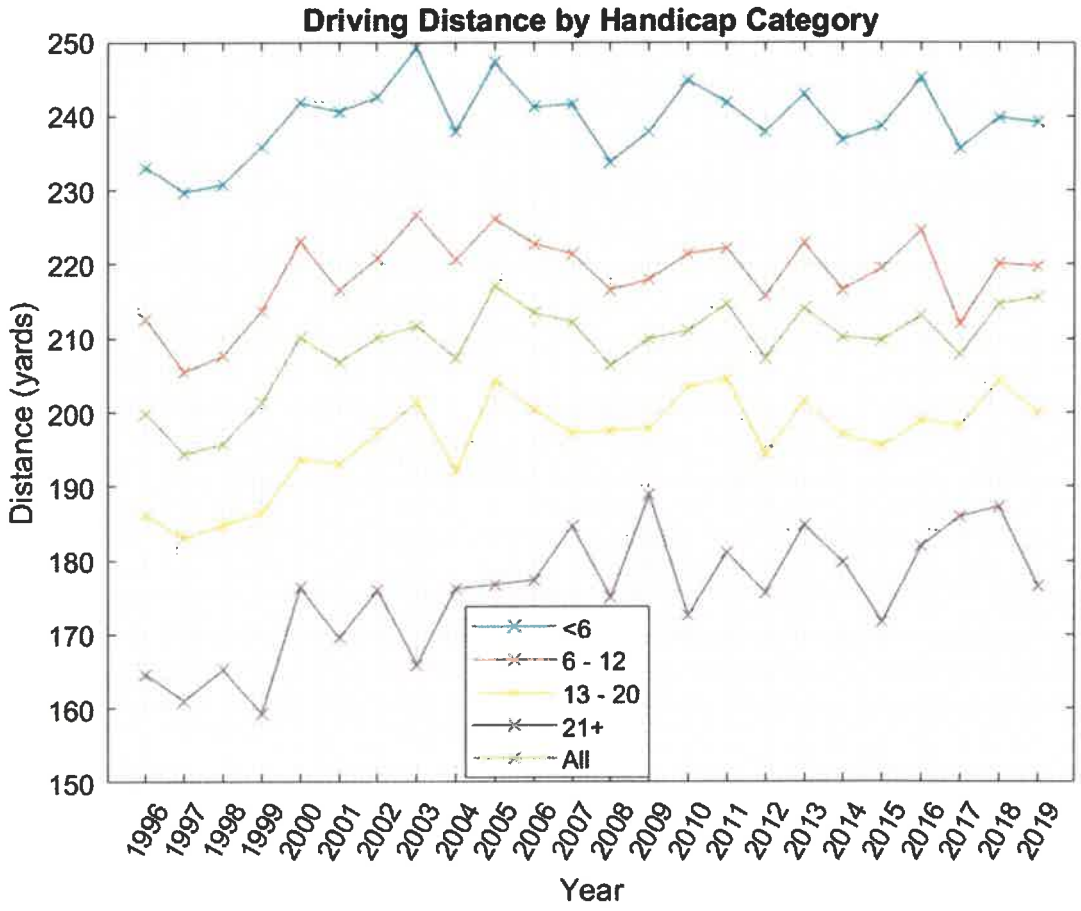


Figure 1

Average male driving distances measured in the R&A's amateur driving distance studies.

Document R51 in the Distance Insights Library (the "Library") references an Arccos 360 study of 10 million drives across 100 countries between 2015 and 2018. The study indicates that driving distances remained flat or decreased across all age and handicap groups, with the average drive decreasing from 220.63 to 217.07. This research clearly indicates that driving distance for recreational golfers is not increasing.

Elite Golf: Driving distances across the various Tours have been largely stable since 2002, as shown in Figure 2.

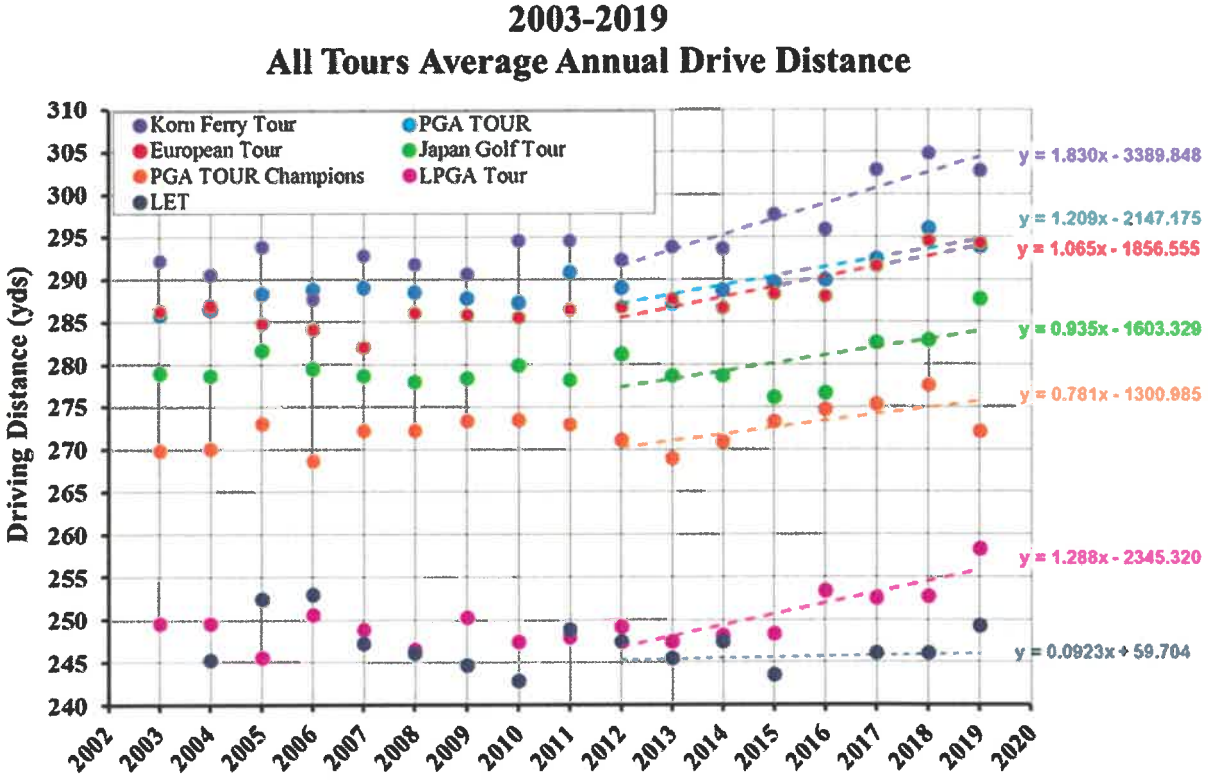


Figure 2
Tour average driving distance since 2003 (with linear regressions since 2012).

The recent increase in 2017 and 2018 is largely due to course selection/set up and weather. 33% of the distance increase on the PGA Tour in 2017 is attributable to the courses played in the Majors, with 25% attributable to the US Open alone. In fact, average driving distance at Erin Hills was 20.4 yards longer than at Oakmont in 2016 – a clear example of the game fitting the courses.

Additionally, when lower rainfall levels in those years (as shown below in Figure 3) are factored in, average distance actually decreased.

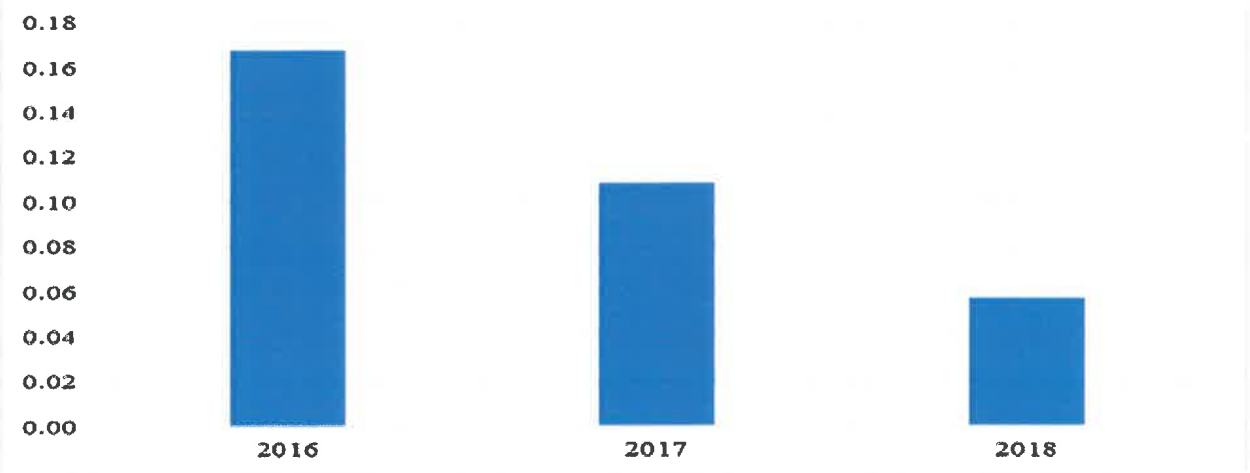


Figure 3
Average daily precipitation (inches)

It is also worth noting that players on the PGA Tour, European Tour and Korn Ferry Tour who changed equipment, due to a manufacturer exiting the market, experienced driving distance gains in 2017 of 7.1, 8.0 and 10.3 yards, respectively.

It may be safe to say that many of the attributes that have been identified on page 35 of the Report and page 3 of R40 of the Library as contributing to hitting distance at the elite level have peaked and stabilized since 2002. Most of today's elite players have entered the game as athletes or have enhanced their athleticism; through the use of coaching and launch

monitors they have optimized their equipment and swings; and with the help of mental coaches and accurate yardage books they have fine-tuned course management strategies. We do not believe that dramatic future improvements in any of these areas is likely to occur.

2. Is there a "continuing trend" of lengthening golf courses?

As with player hitting distances, the data presented in the Report demonstrates that course and playing lengths have leveled, particularly over the past 20 years.

There is an underlying theme expressed in the DIP documents that, historically, driving distance increases predate and inspire longer courses. Even a cursory examination of Figure 4 shows that not to be the case.

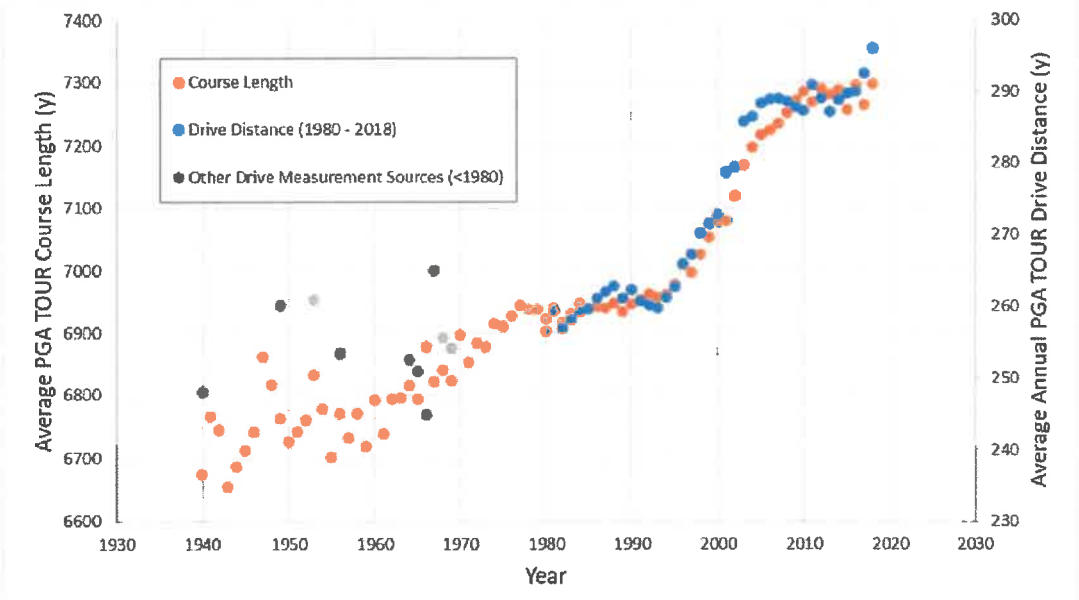


Figure 4
Relationship between annual average drive distance and annual average playing lengths.

Historically, there are instances where courses have lengthened to respond to equipment innovation, but there are also clearly instances where innovation has responded to courses that were lengthened for reasons independent of hitting distance. You need to look no further than the "championship" and real estate phases of golf course architecture to see that is the case.

More importantly, the data in Figures 5 – 8 below clearly shows that any trend in increasing golf course lengths and playing lengths has leveled and is now in an extended period of stasis.

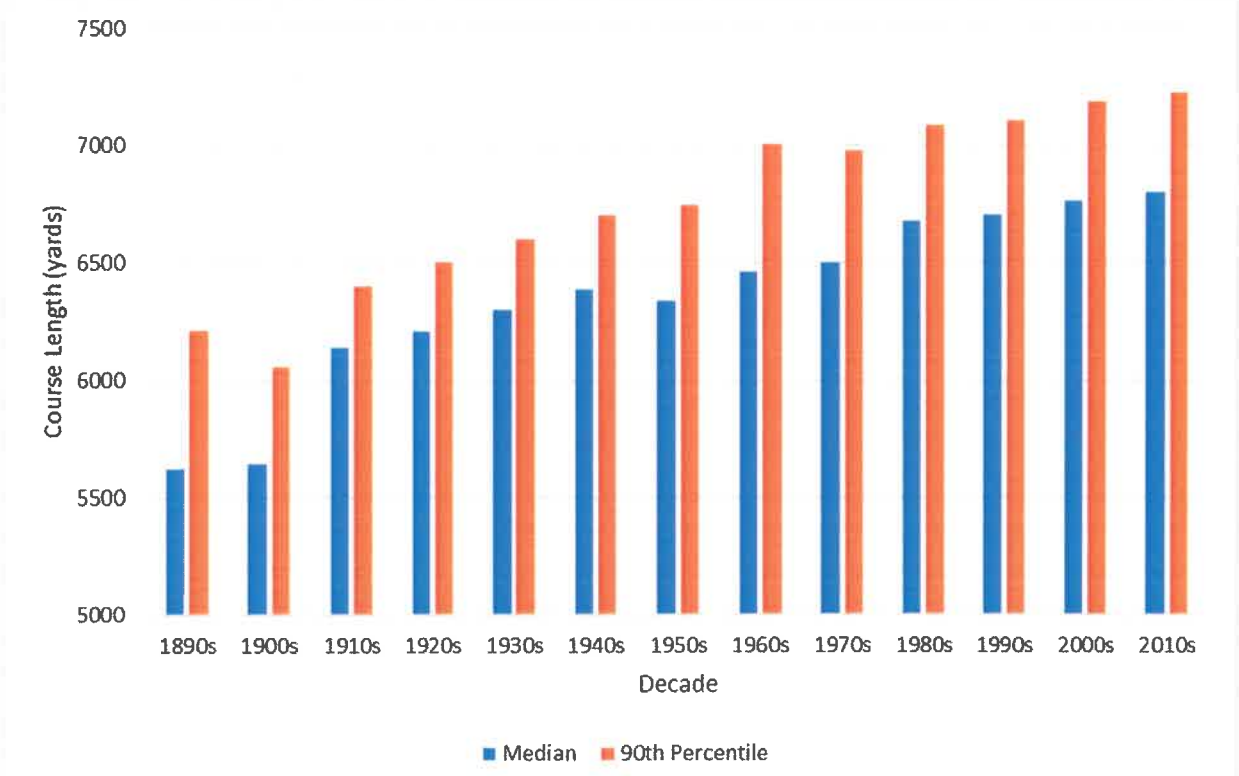


Figure 5
Evolution of golf course length (longest tees) in the U.S. by decade.

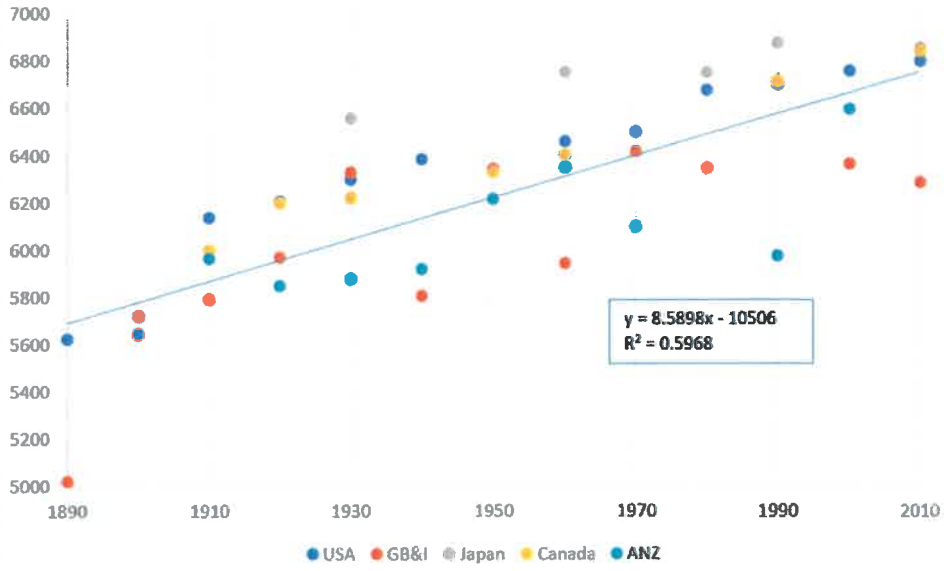


Figure 6
Long-Term golf course lengths median trend.

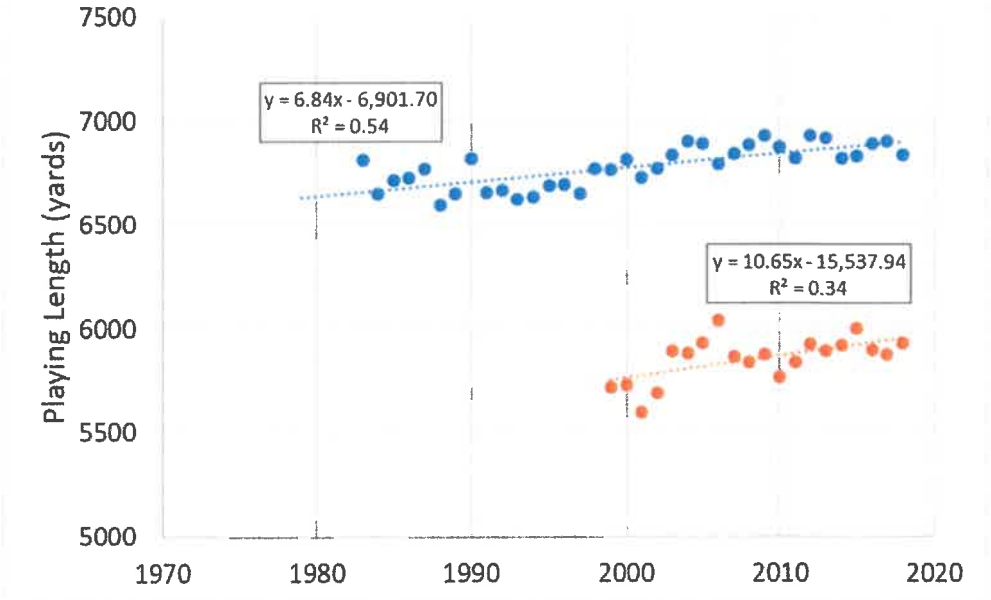


Figure 7
Average playing length of U.S. state and regional golf association events. Men's (blue) and Women's (orange)

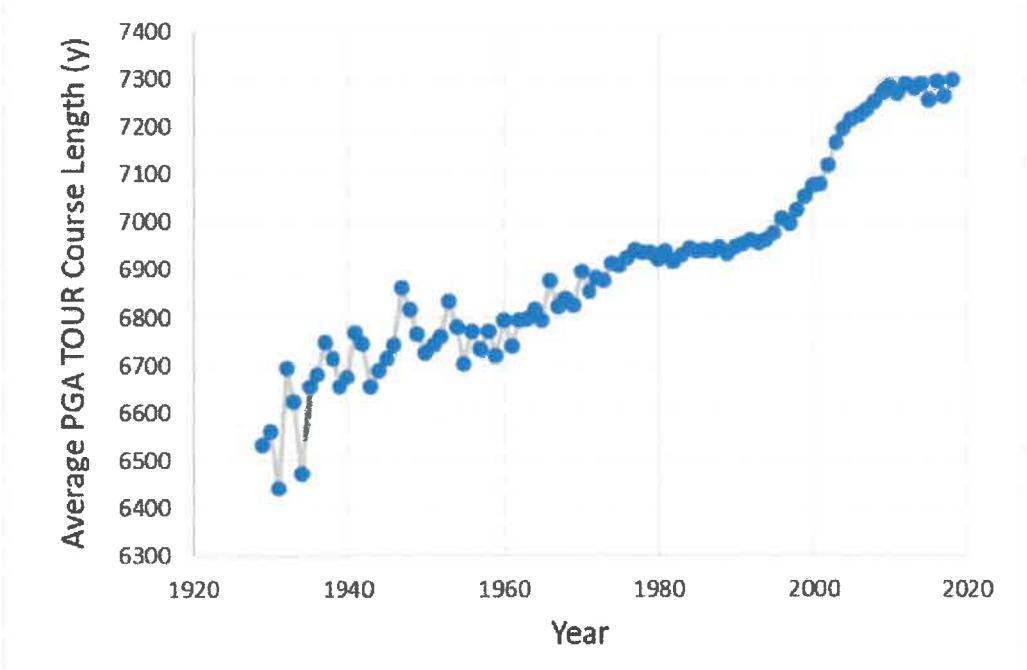


Figure 8
Annual average playing lengths on the PGA TOUR (1929-2018)3. Relationship between Playing Lengths and Drive Distances.

This conclusion is further bolstered by the course length data for new courses in the Report which is based on an NGF report that looks at course openings between 2011 and 2016 (R37 in the Library). As seen in Figure 9 below, average playing length from the back tees of the courses studied was just over 6,900 yards, which compares favorably to the course length by decade data presented in Figure 5 above that shows course lengths flattening. In addition, there is no statistically significant data in the Report beyond 2016 that would suggest a "trend" of lengthening courses.

Average Playing Length from All Tee Markers by Course Type (yds.)						
Tee Marker	Forward	#2	#3	#4	#5	Back
Real Estate Development	4745	4861	5615	6059	6555	6915
Just Golf	4762	4857	5607	6052	6549	6909
Resort	4773	4963	5622	6068	6564	6917
Resort and Real Estate Dev	Insufficient data					

Figure 9
Playing length statistics for forward to back tees by type of real estate project.

Although the Report and Conclusions have attempted to present a straight line of course length increases over the past 100+ years, the data actually shows that any trend of lengthening courses has abated and may in fact be moving in the other direction. This is true even when viewed through the lens of elite playing lengths (see Figures 10 – 12 below). This data again clearly shows that playing lengths, even at the elite level, have been stable over the last 10+ years.

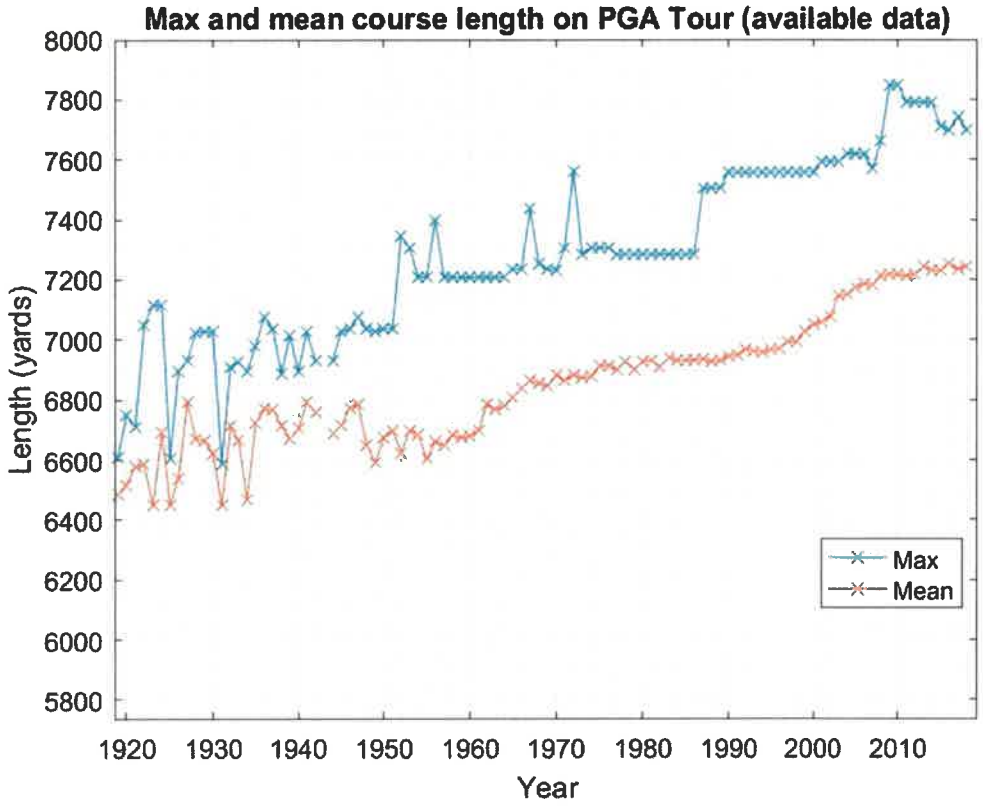


Figure 10
Playing length of PGA Tour events to 2018.

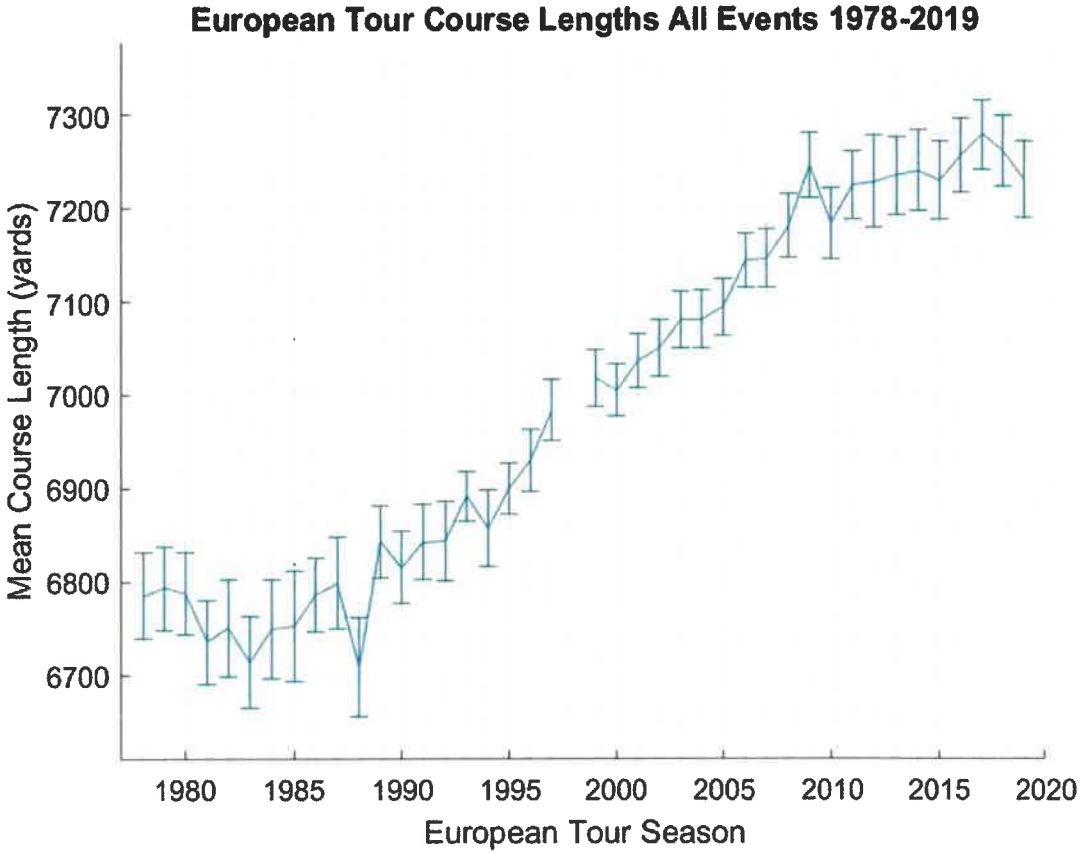


Figure 11
Average playing length of European Tour courses.

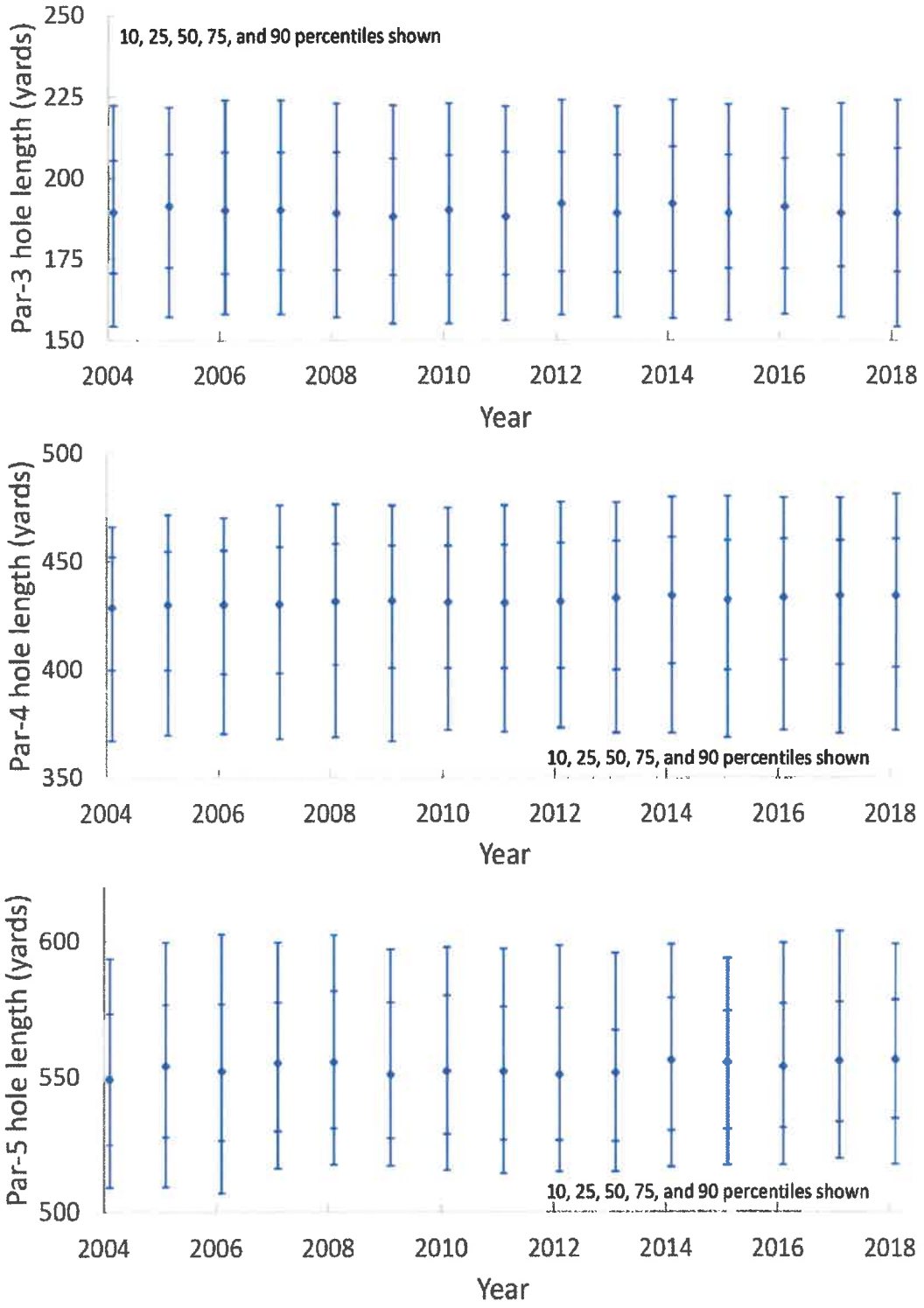


Figure 12
Percentiles of PGA Tour hole lengths from 2004 to 2018, with 10, 25, 50 (i.e., median), 75 and 90 percentiles shown.

In the Report, the issue of adding length to courses is only mentioned in relation to elite play and those playing from the longest tees. We know that elite play is relegated to at most .001% of the playing population and at most 1% of courses. *Play it Forward* data published by the USGA indicates that a golfer averaging 275 yard drives should be playing a 6,700 yard golf course and that more than 50 percent of U.S. golf courses are of that length. We believe that less than 2 percent of all golfers average drives at 275 yards or more. These facts beg the question of where any demand for longer courses could be coming from. It certainly doesn't appear to be organically driven by at least 98% of golf participants. That would suggest that there should not be a continuing demand for longer courses. Note: The GB's can certainly confirm what percentage of players use which tees based on scores turned in for handicap purposes. We request that the data be shared.

In addition to the course length data presented in the Report, the survey data from stakeholders also supports a long-term trend in flattening course lengths.

Figures 13 and 14 below show that there is no consensus among stakeholders for lengthening existing courses or longer new courses and, in fact, 88% believe that adding forward tees will be most impactful.

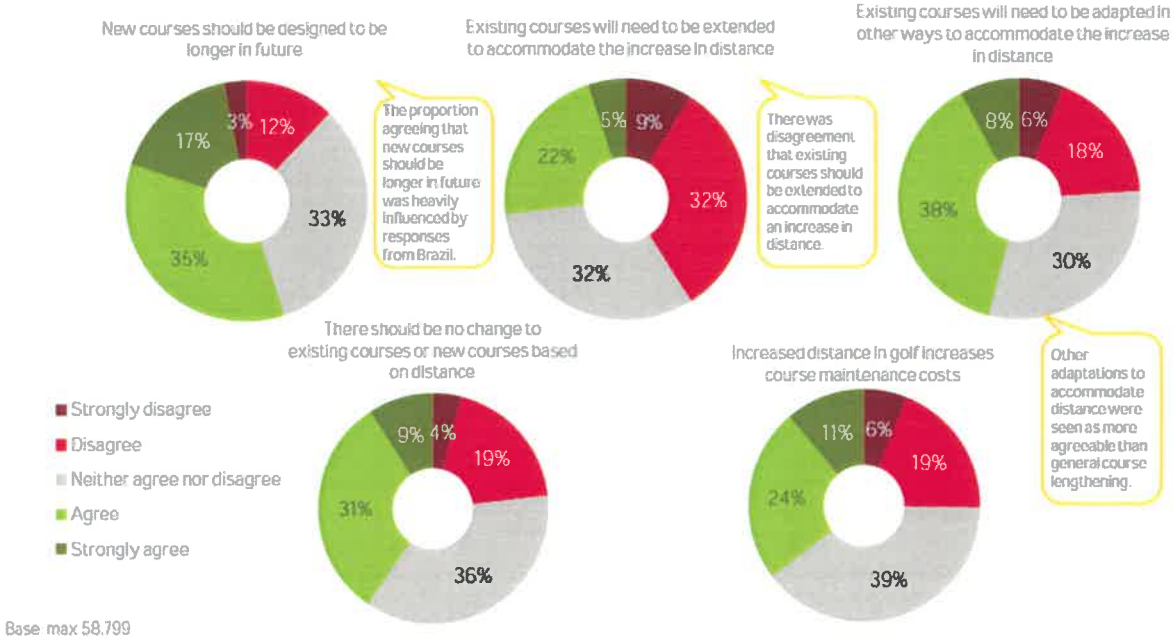


Figure 13
Attitudes to distance – the golf course

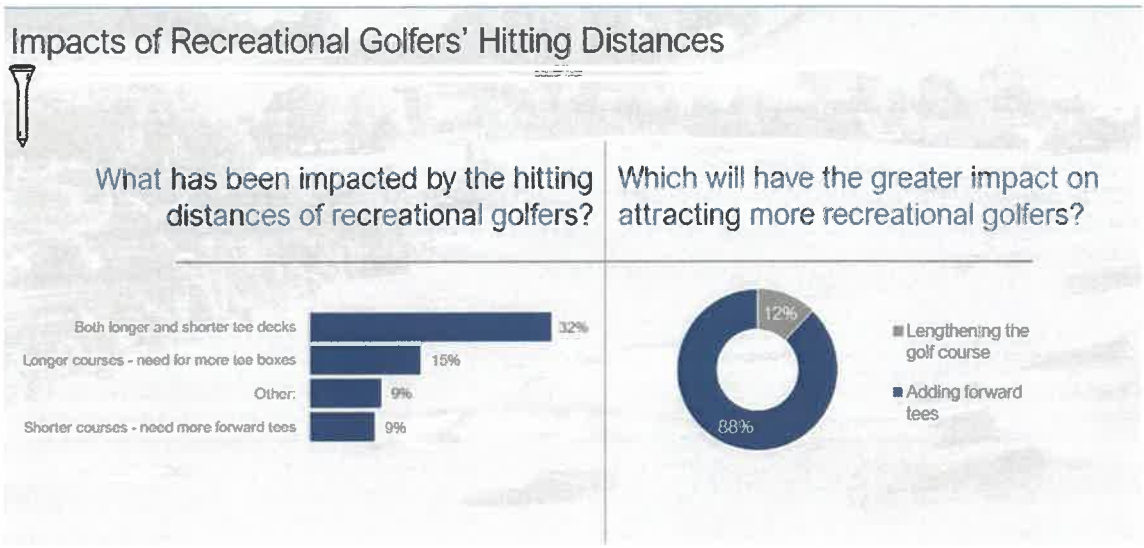
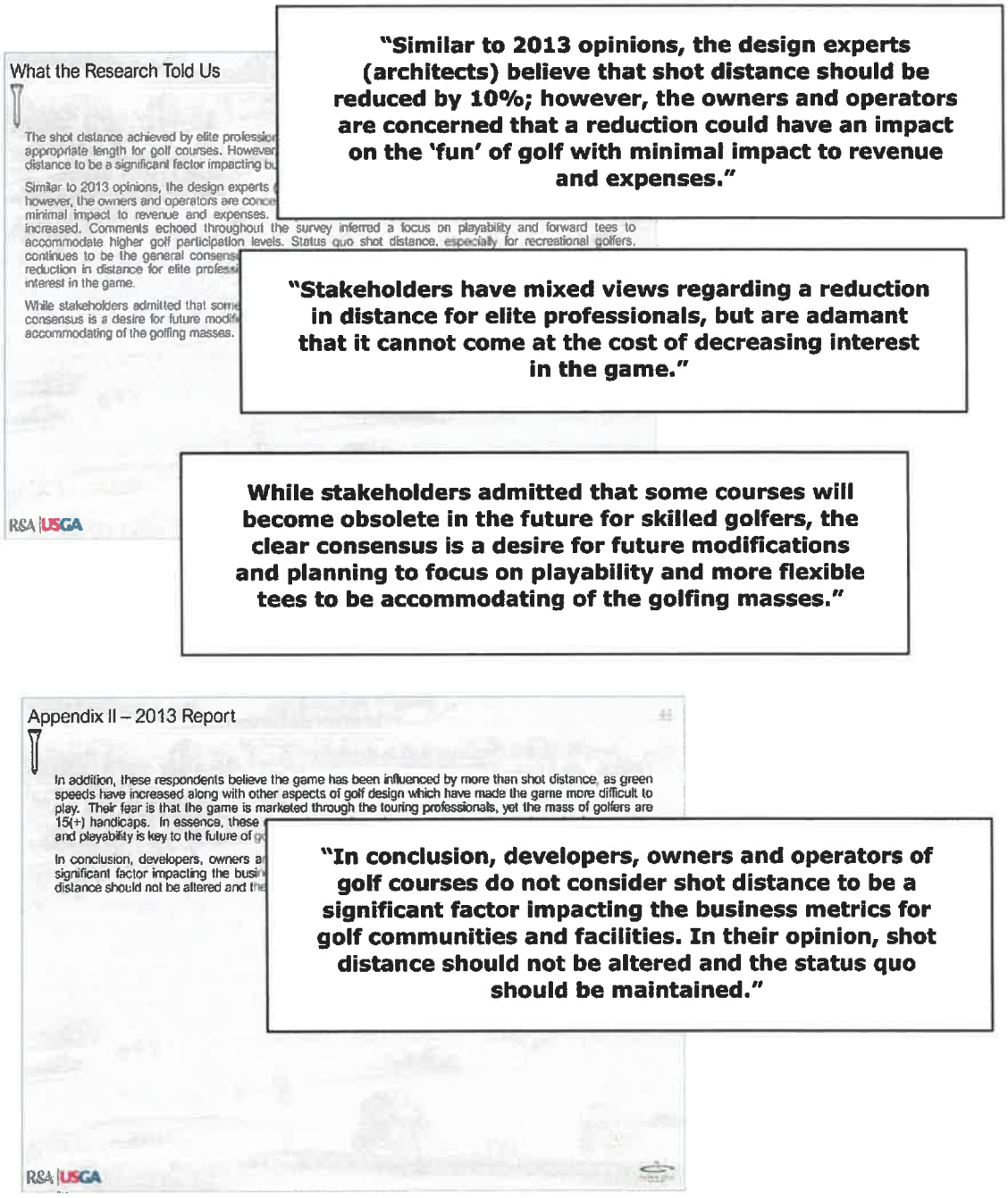


Figure 14
Impacts of recreational golfer hitting distances

As can be seen below in the executive summary from R29 of the Library, stakeholders (other than architects) are not demanding or even requesting reduced distance at either the recreational or elite level.



Pages 4 and 44 from R29 Global Golf Advisors Survey Report

In that same study 81% advocated for no change in distance for recreational players and 60% advocated the same for elite play. Respondents also indicated that most course modifications would still take place and there would be no reduction in operating expenses, even if there was a distance rollback. Given the fragmented and selective nature of the data presentation, it is not clear what percentage of course modifications resulted in the addition of back or forward tee boxes, but it appears the trend is for the latter. There are several other areas in the Report that indicate that many recreational players should be playing from tees forward of where they currently play, suggesting that many courses were overbuilt to begin with. (See page 54 of the Report.) Figure 15 shows that median course length remains flat and Figure 16 shows the trend for shorter forward tees.

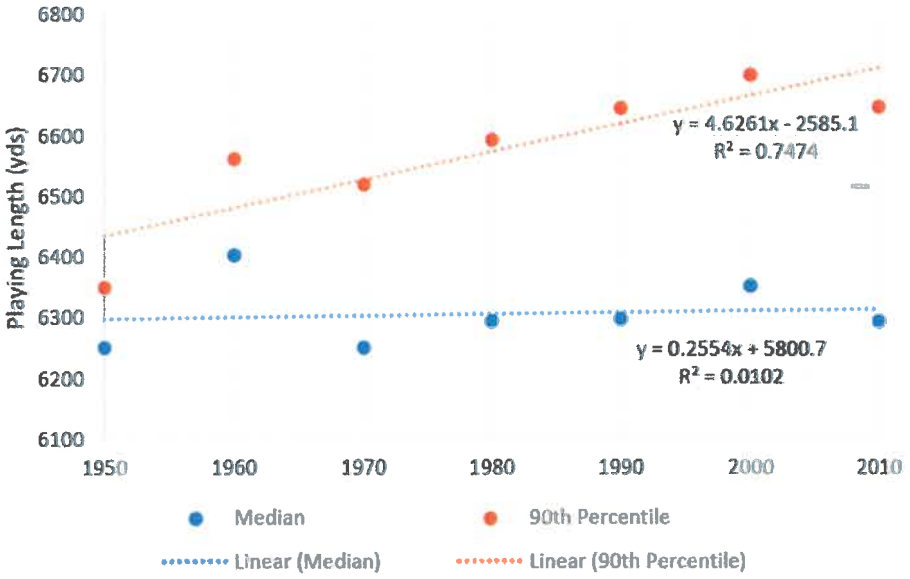


Figure 15
Playing length of second longest tees: 1950s to 2010s

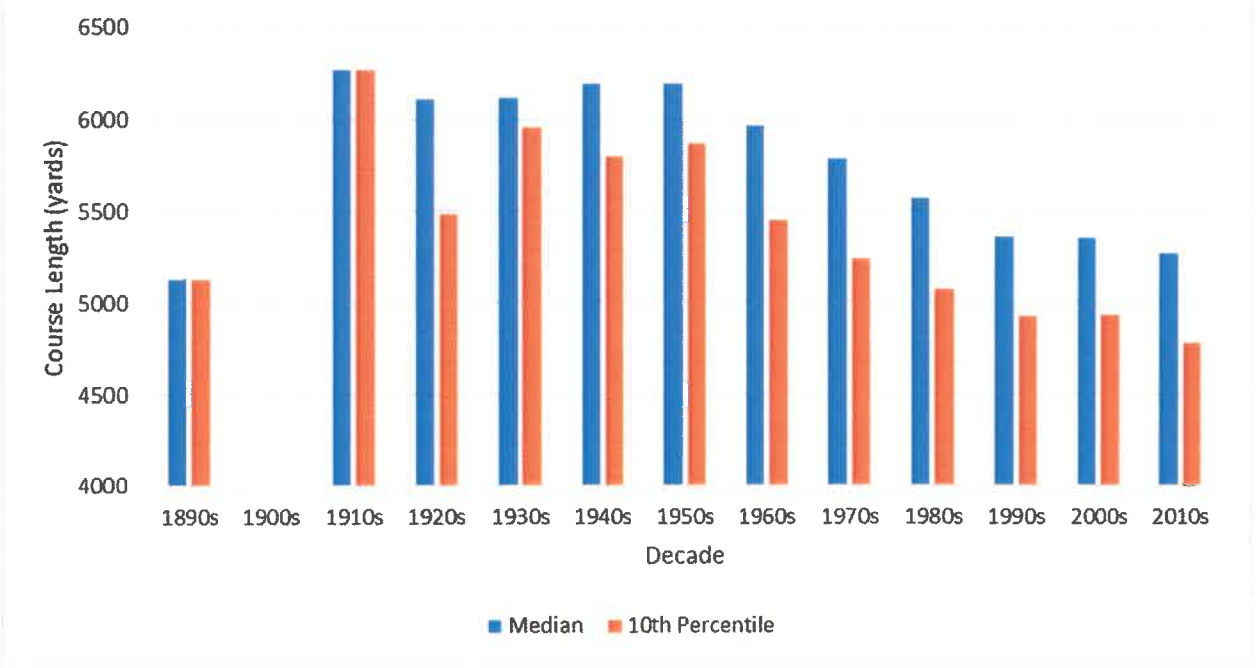
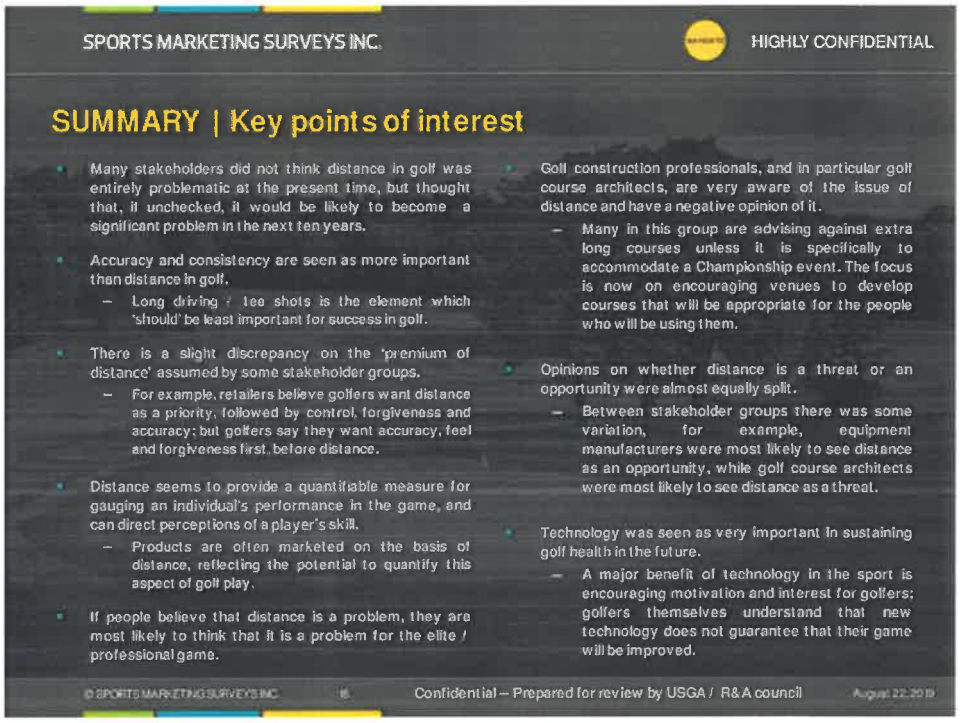


Figure 16
USA Golf Course playing length by decade – most forward tee

Further support for the forward tee trend can be found in the 2021 ASGCA-SLRG Golf Facility Market Trend Watch. This document provides data from 319 participants over the three-year period 2019 – 2021. Pages 33, 35 and 37 of the Report show that superintendents, architects and general managers all placed adding forward tees over adding back tees as priorities over the three-year period by a substantial margin. In addition, for course projects over the past 24 months, pages 49 and 51 indicated those citing forward tees far outnumbered those citing back tees, again for all three years. Another query in the report on page 16 showed that less than 15% of architects agreed that increasing distance has been a major impetus for course renovations and new builds over the past five years. This is clear evidence of what the "continuing trend" is.

Further stakeholder perspectives are presented in a survey conducted by SMS (R27 of the Library). The excerpts from pages 16-19 below further amplify that there is no call for action on the part of stakeholders.

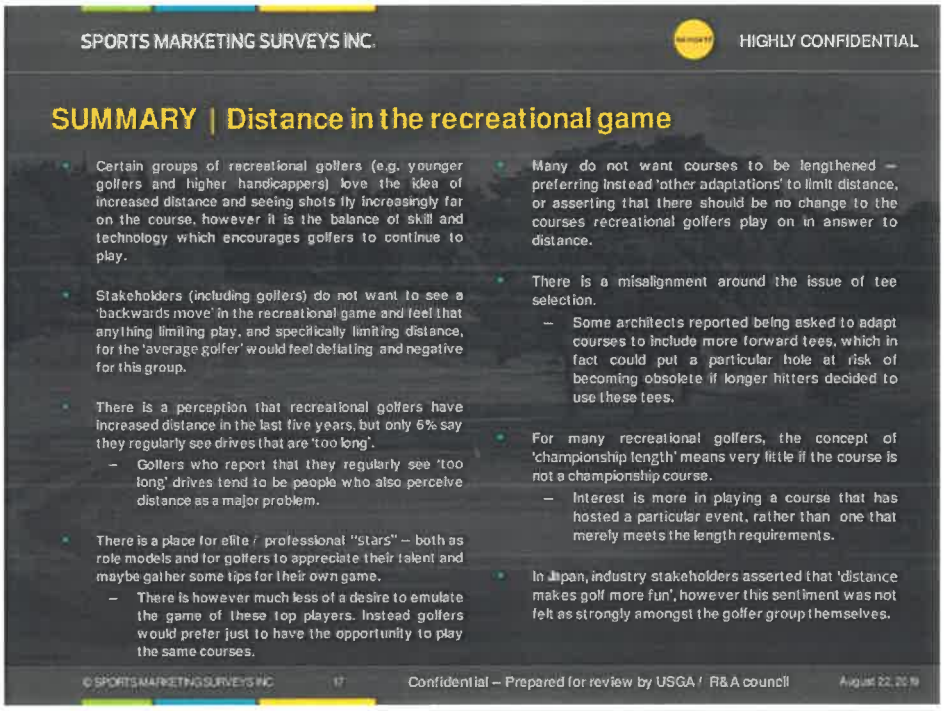


SPORTS MARKETING SURVEYS INC. HIGHLY CONFIDENTIAL

SUMMARY | Key points of interest

- Many stakeholders did not think distance in golf was entirely problematic at the present time, but thought that, if unchecked, it would be likely to become a significant problem in the next ten years.
- Accuracy and consistency are seen as more important than distance in golf.
  - Long driving / tee shots is the element which 'should' be least important for success in golf.
- There is a slight discrepancy on the 'premium of distance' assumed by some stakeholder groups.
  - For example, retailers believe golfers want distance as a priority, followed by control, forgiveness and accuracy; but golfers say they want accuracy, feel and forgiveness first, before distance.
- Distance seems to provide a quantifiable measure for gauging an individual's performance in the game, and can direct perceptions of a player's skill.
  - Products are often marketed on the basis of distance, reflecting the potential to quantify this aspect of golf play.
- If people believe that distance is a problem, they are most likely to think that it is a problem for the elite / professional game.
- Golf construction professionals, and in particular golf course architects, are very aware of the issue of distance and have a negative opinion of it.
  - Many in this group are advising against extra long courses unless it is specifically to accommodate a Championship event. The focus is now on encouraging venues to develop courses that will be appropriate for the people who will be using them.
- Opinions on whether distance is a threat or an opportunity were almost equally split.
  - Between stakeholder groups there was some variation, for example, equipment manufacturers were most likely to see distance as an opportunity, while golf course architects were most likely to see distance as a threat.
- Technology was seen as very important in sustaining golf health in the future.
  - A major benefit of technology in the sport is encouraging motivation and interest for golfers; golfers themselves understand that new technology does not guarantee that their game will be improved.

 16 Confidential – Prepared for review by USGA / R&A council August 22, 2019

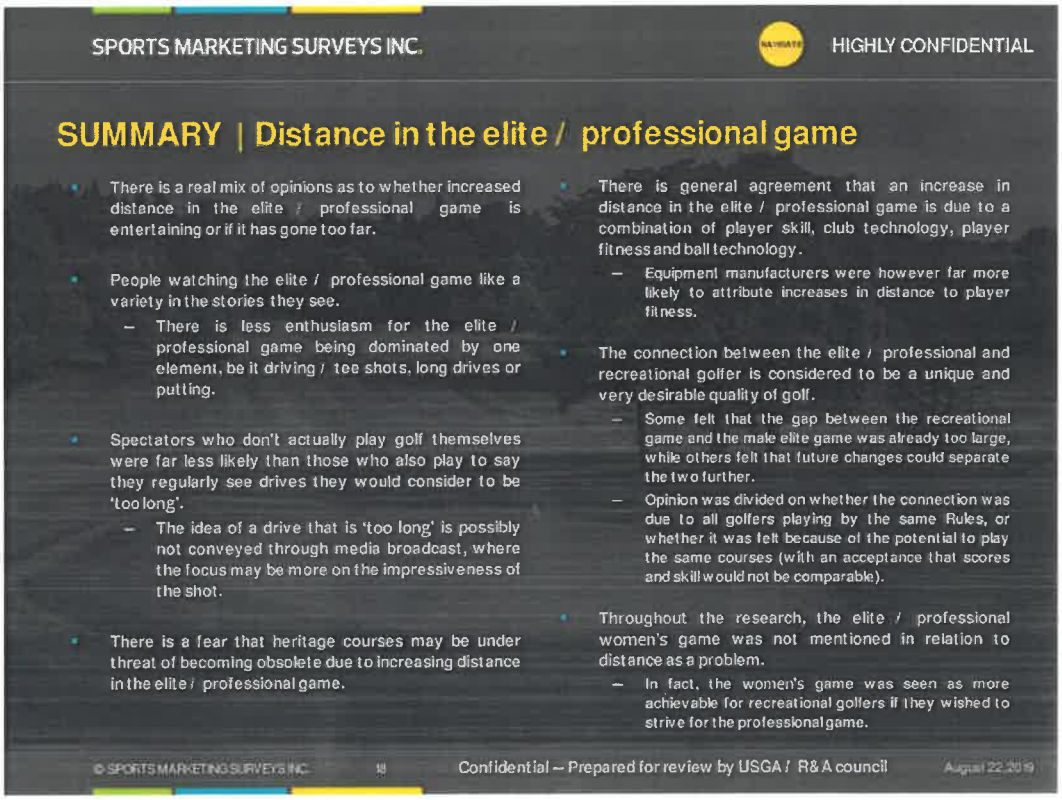


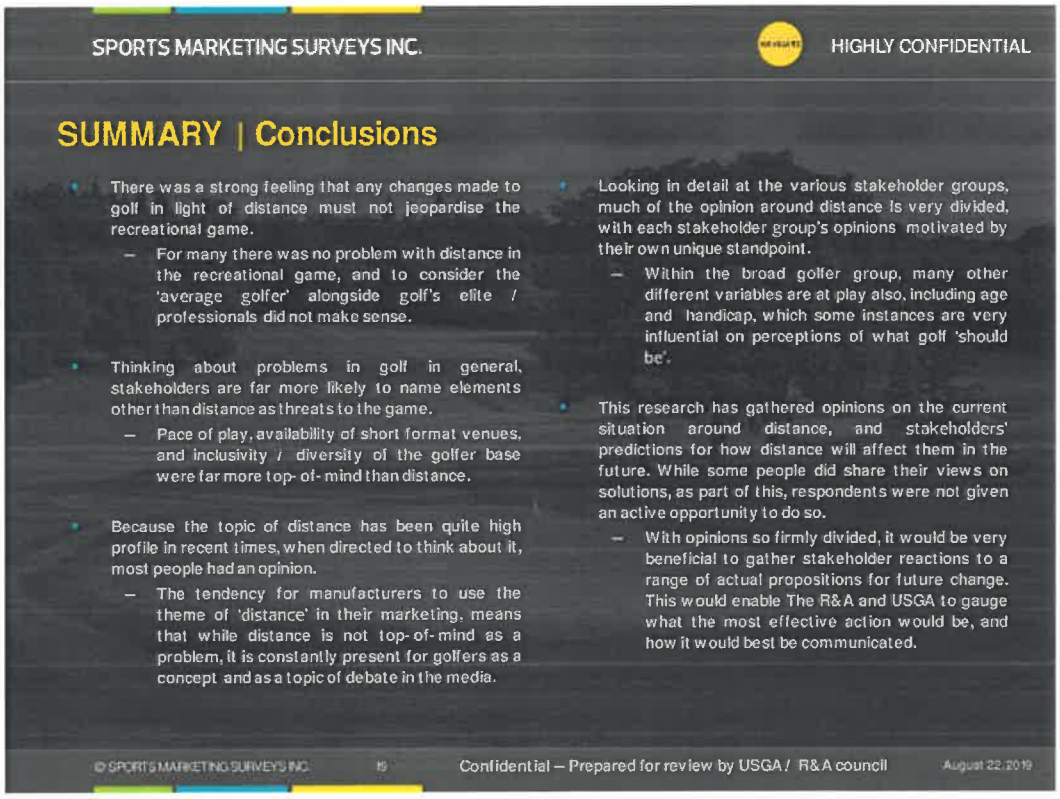
SPORTS MARKETING SURVEYS INC. HIGHLY CONFIDENTIAL

SUMMARY | Distance in the recreational game

- Certain groups of recreational golfers (e.g. younger golfers and higher handicappers) love the idea of increased distance and seeing shots fly increasingly far on the course, however it is the balance of skill and technology which encourages golfers to continue to play.
- Stakeholders (including golfers) do not want to see a 'backwards move' in the recreational game and feel that anything limiting play, and specifically limiting distance, for the 'average golfer' would feel deflating and negative for this group.
- There is a perception that recreational golfers have increased distance in the last five years, but only 6% say they regularly see drives that are 'too long'.
  - Golfers who report that they regularly see 'too long' drives tend to be people who also perceive distance as a major problem.
- There is a place for elite / professional "stars" – both as role models and for golfers to appreciate their talent and maybe gather some tips for their own game.
  - There is however much less of a desire to emulate the game of these top players. Instead golfers would prefer just to have the opportunity to play the same courses.
- Many do not want courses to be lengthened – preferring instead 'other adaptations' to limit distance, or asserting that there should be no change to the courses recreational golfers play on in answer to distance.
- There is a misalignment around the issue of tee selection.
  - Some architects reported being asked to adapt courses to include more forward tees, which in fact could put a particular hole at risk of becoming obsolete if longer hitters decided to use these tees.
- For many recreational golfers, the concept of 'championship length' means very little if the course is not a championship course.
  - Interest is more in playing a course that has hosted a particular event, rather than one that merely meets the length requirements.
- In Japan, industry stakeholders asserted that 'distance makes golf more fun', however this sentiment was not felt as strongly amongst the golfer group themselves.

 17 Confidential – Prepared for review by USGA / R&A council August 22, 2019





Pages 16 – 19 of R27 – Sports Marketing Survey Report

3. Is there an imbalance between distance and other elements of the game, such as accuracy and shot making?

No evidence of distance creating an imbalance at the recreational level was presented in the Report. Any concerns with this issue are clearly at the elite level of play. Analysis of this issue is presented in R14 of the Library. This study focuses on the change in strokes gained data from 2004 – 2018. It concludes that PGA Tour players have i) increased the percentage of strokes gained due to driving distance from 18% to 23% and ii) seen a marginal decrease in the importance of driving accuracy during that period. However, page 62 of the Report notes that there has been a slight decrease in the value of distance for a player 15 yards longer than the field over the past 3 years. R14 also indicates that other strokes gained statistics, such as greens in regulation, putting, cost of missing a fairway and the rough penalty have remained essentially unchanged. It should also be noted that page 63 of the Report indicates that on the PGA Tour, the correlation between driving distance rank and money list rank is second to the correlation between GIR rank and money list rank. On other tours that correlation it is well down the pecking order.

Additionally, as shown in Figure 17 below, increases in driving distance at the elite level, have not resulted in a reduction in average scoring.

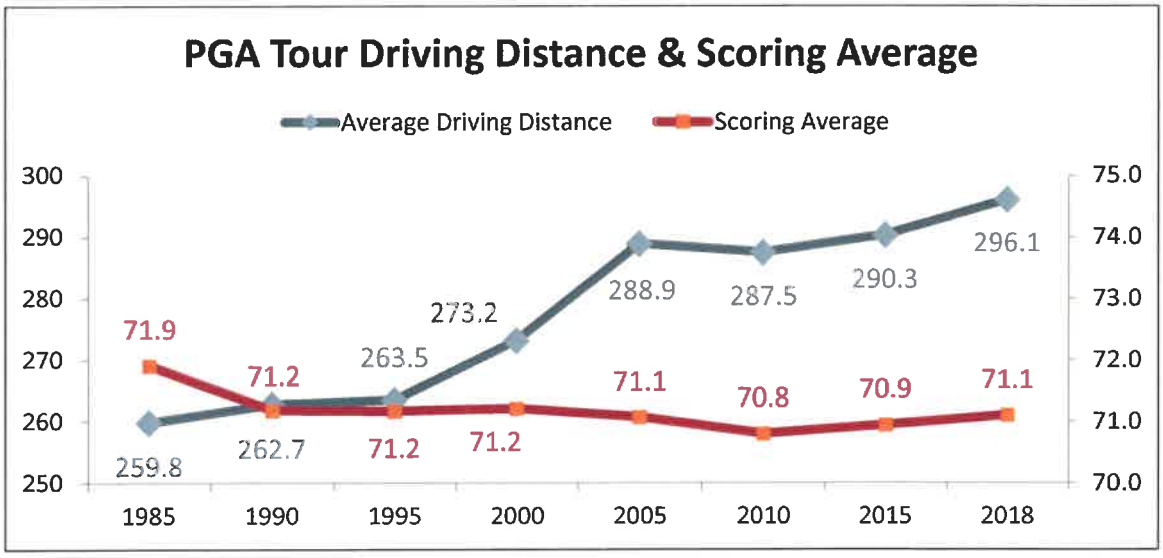


Figure 17
Data made available by the PGA Tour

It is difficult to see how the above data demonstrates a game "out of balance".

Views expressed in the survey at R27 also support a game in balance. Figure 18 from that survey shows that participants generally equate skill, fitness and equipment technology as having similar impacts.

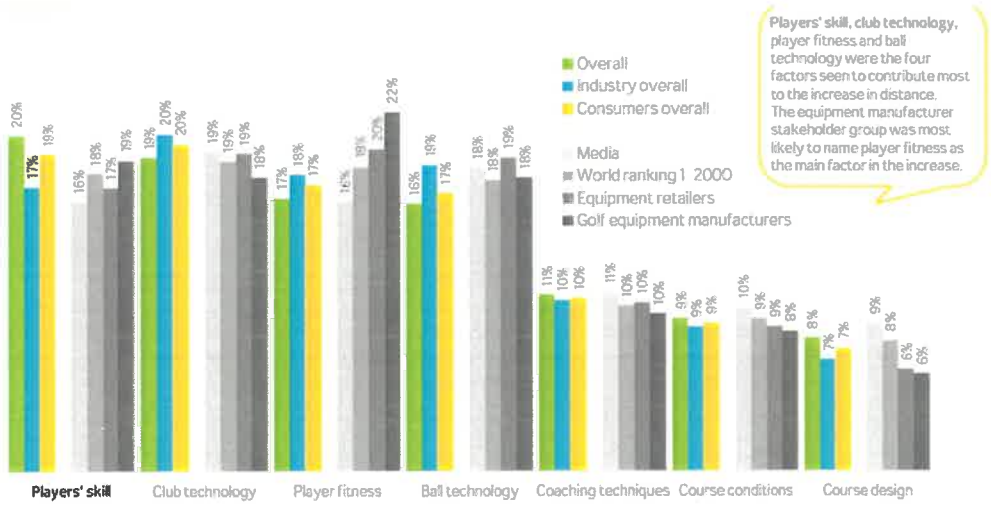


Figure 18
Attitudes to distance: contributing factors

Another study was derived from interviews with 41 current or retired elite professionals. (See R40 of the Library). This study did not provide any quantitative analysis of the interview feedback received. It instead merely provided the feedback anecdotally, finding a variety of opinions. Given this presentation, it is impossible to determine whether any consensus views emerged from this study.

4. Is distance having a negative impact on golf course sustainability?

Although sustainability is often cited as a driving force behind the DIP, very little time was devoted to it in the Report – pages 71 to 73. Given the limited focus and information provided in the Report, it is difficult to understand the role that sustainability is playing in the GB's issuance of the Report, the NC's and the AI's. However, it is useful to note that the discussions relating to course length and footprint point to less fairway acreage on average as courses have lengthened over time. (See Figure 19 below).

Decade Opened	Average Fairway Area Earliest Map (acres)	Average Fairway Area Most Recent Map (acres)	Change (acres)	Percent Change
1920s	41.13	24.93	-16.2	-39.39%
1930s	41.41	23.64	-17.77	-42.91%
1940s	40.92	23.66	-17.26	-42.18%
1950s	41.94	23.43	-18.51	-44.13%
1960s	32.54	25.04	-7.5	-23.05%
1970s	33.1	23.2	-9.9	-29.91%
1980s	24.08	21.41	-2.67	-11.09%
1990s	24.58	24.37	-0.21	-0.85%
2000s	26.21	25.26	-0.95	-3.62%
2010s	31.2	31.2	0	0%

Figure 19
Comparison of fairway acreage by decade opened (80 U.S. course sample)

The study in R33 of the Library also shows that of the 80 courses studied there was an average course footprint increase of only one acre between the earliest and current data for the courses studied and that maintained acreage (tees, fairways, bunkers and greens combined) continues to decrease on average. Incidentally, the discussions related to enlarged golf course footprints all fail to discuss the apportionment of the acreage for uses other than the golf course itself (particularly enhanced practice facilities).

5. Is distance driving up costs for golf courses and golfers?

The Report at pages 69-71 and R15 of the Library provide data related to golf course maintenance costs and modification construction costs. These sections

are labeled as costs related to increased distance. However, it is clear that golf courses often elect to incur those costs for reasons other than addressing an issue related to driving distance. As noted in Item 2 above, many courses are now incurring the cost of installing forward tees to address courses that were initially overbuilt – many in response to real estate development requirements and many for the purpose of acquiring the label of being a "championship" course. We recognize that golf course maintenance costs have risen and will continue to rise. We also recognize that golf courses will continue to undergo renovations for a variety of reasons, most not related to hitting distance. However, given that the Report has not established the existence of a "continuing trend" in increased golf course length, and in fact appears to have established the opposite, we do not believe that those costs can fairly be attributed to distance.

6. Is distance having a negative impact on the time it takes to play?

The data provided related to this issue occupies a portion of page 74 of the Report and is based on simulations that are reported in R34 of the Library. The simulations indicate a 4.5 to 7 minute increase per round, for elite and recreational play, respectively, for a 500-yard increase in course distance. Again, as we don't believe there is a "continuing trend" of increased golf course length, we don't believe these hypothetical increases in playing time will become a factor for the game.

7. Is golf equipment responsible for any recent distance increases?

The Conclusions and the Key Findings documents of 2/4/20 cite a variety of factors that the GB's may investigate relative to driving distance:

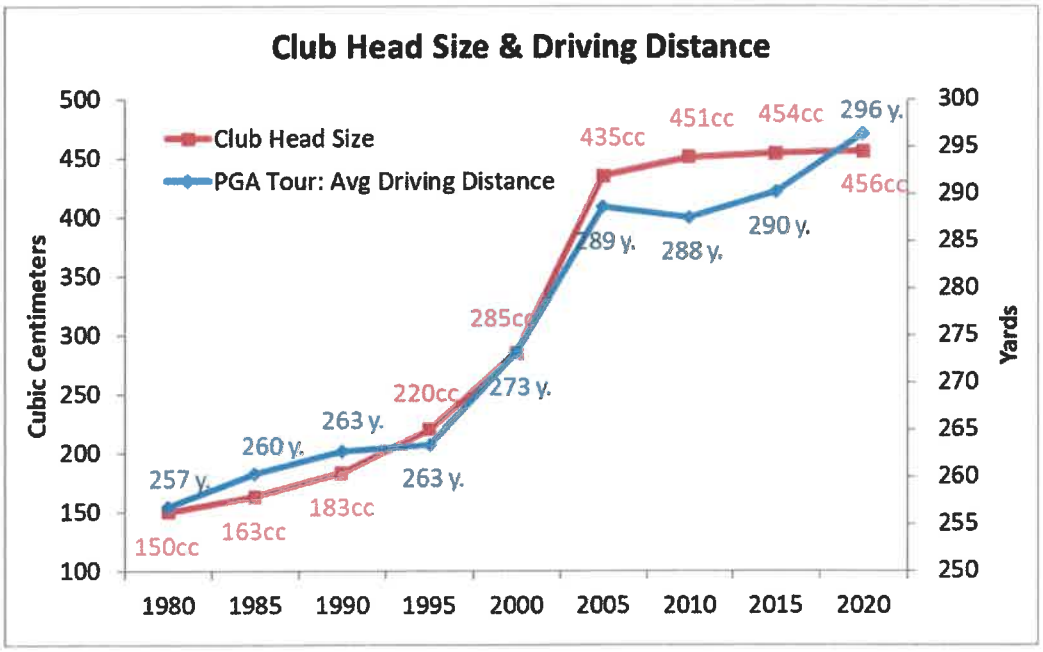
- overall conformance specifications for balls and clubs
- equipment testing processes, protocols and standards
- local rule options for use of reduced-distance equipment
- guidance on course design, agronomy, maintenance and setup
- guidance on the use forward tees and appropriate playing distances for golfers

It is more than interesting that all NC's and AI's are focused on the three equipment related topics. Even though the NC document mentions the latter two, it does not put them forward for Notice & Comment or even for official consideration as Areas of Interest.

We find this more than interesting because we do not find any data in the DIP documents that even suggests a correlation between equipment innovation and increases in driving distance subsequent to the adoption of the MOI standard in 2006. There is a very good reason for this – because none exists.

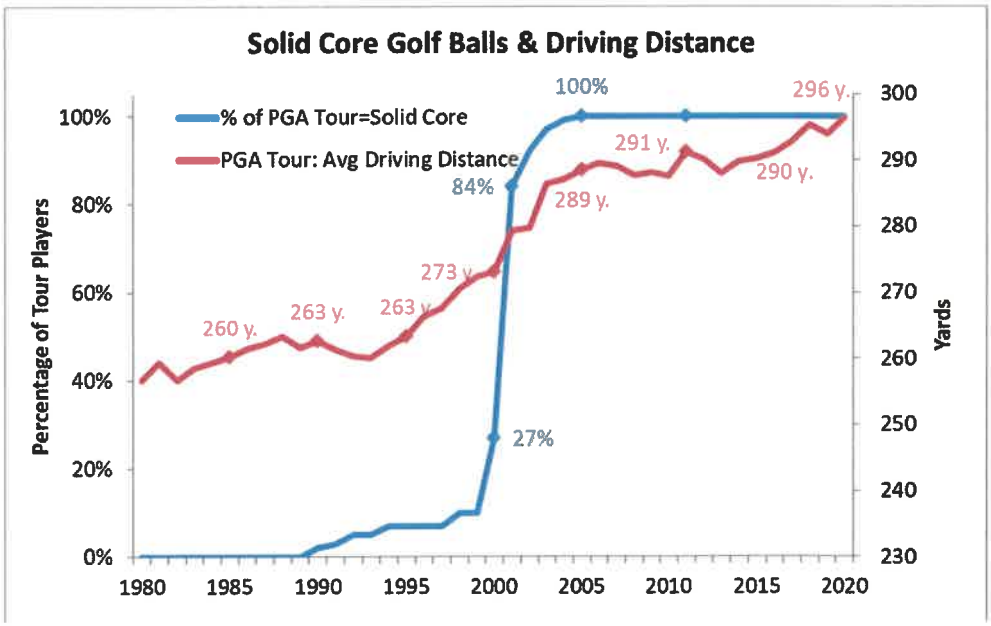
The following three figures demonstrate the impact that the equipment rules, which have been enacted and updated extensively between 1998 and 2006, have had on the relationship between equipment innovation and

distance at the elite level. As regulated technology has matured, driving distance has leveled.



(Source: PGA Tour, Darrell Survey. Average size in volume of driver club heads played on PGA Tour)

Figure 20



(Source: PGA Tour, Darrell Survey, Titleist)

Figure 21

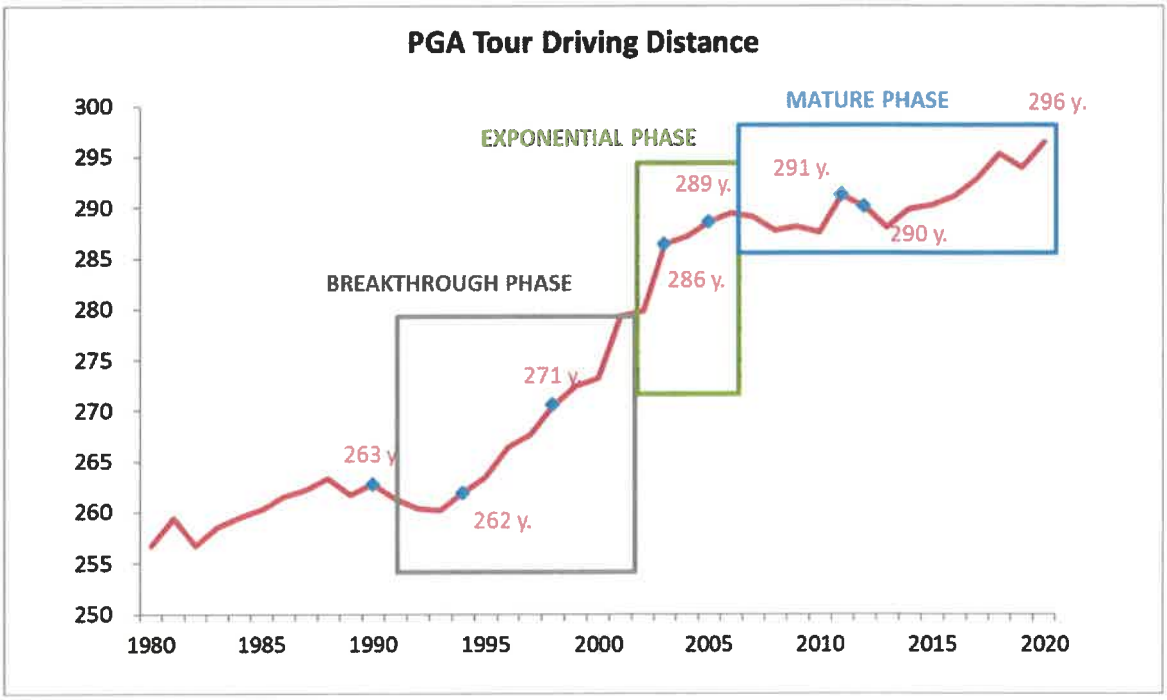


Figure 22
Data collected by Acushnet

But there are other factors that the Report documents as having a direct correlation to hitting distance. Figure 23 below and pages 36 – 40 of the Report contain significant documentation of the impact of the player, swing optimization through launch monitors, equipment optimization through advances in fitting technology, strategic course decision making and course conditions, setup and layout. None of those items are included in the NC's and AI's.

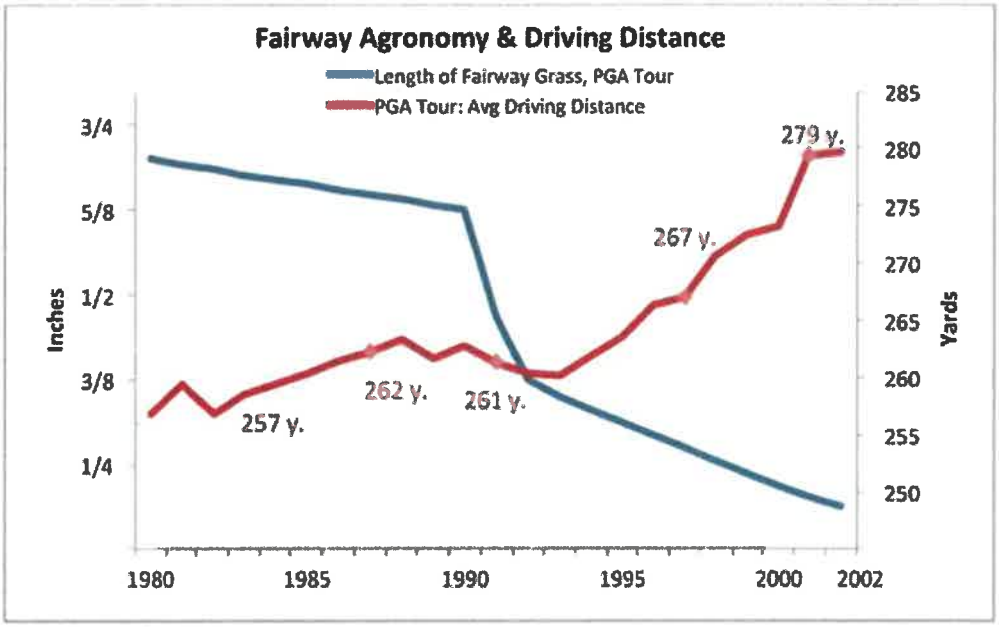


Figure 23

8. Is hitting distance a threat to the game?

The research presented in the Report and Library clearly indicate that the majority of respondents do not see distance as a problem or threat to golf. Figure 24 below shows that only 17% of respondents see distance as a major problem.

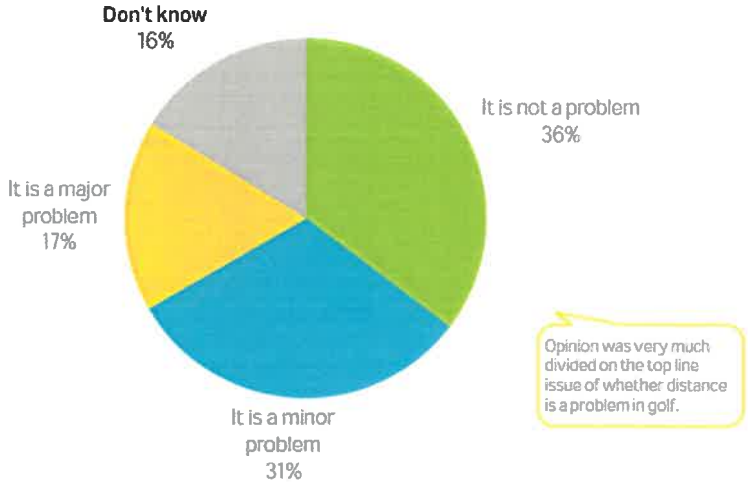


Figure 24
Is distance in golf a "problem" overall?

Page 79 of the Report states "many stakeholders were more likely to identify areas aside from distance as threats to the game." Figure 25 below shows that only 23% of the respondents identified distance as a threat.

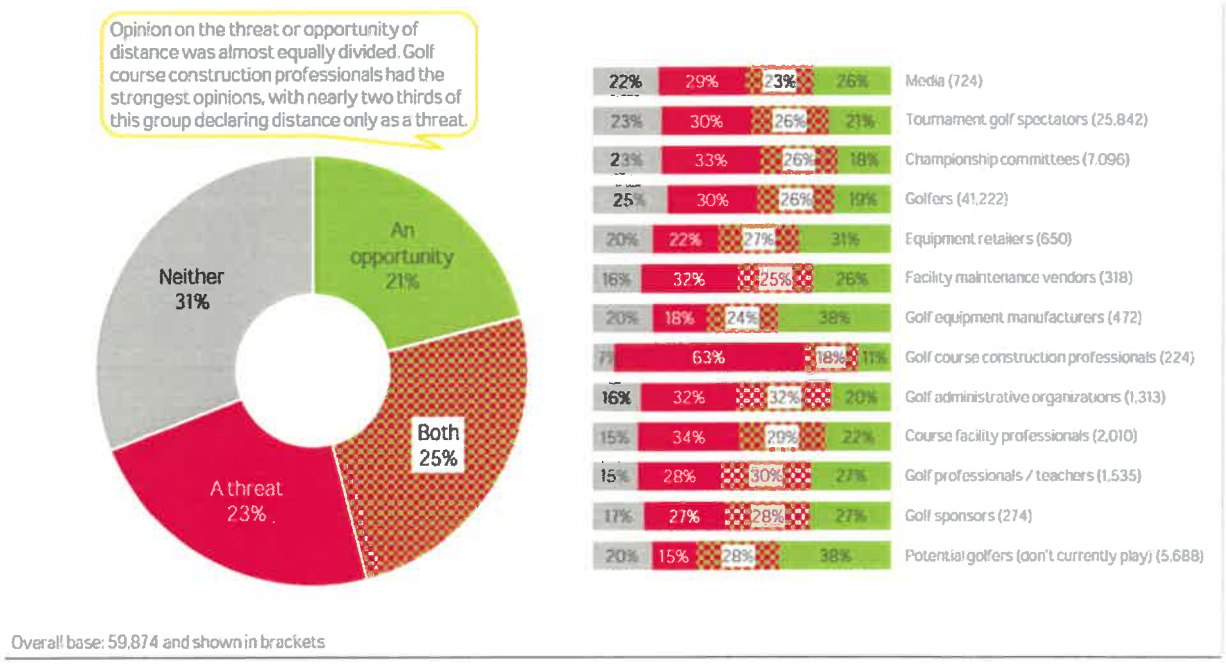


Figure 25
Is distance in golf a threat or an opportunity?

Again, the consensus is that distance is not a problem or threat.

Conclusion

We believe that the data presented in the DIP yields the following conclusions:

i) Hitting distance is not a concern at the recreational level, except as it relates to shorter tees.

ii) Hitting distance at the elite level has plateaued.

iii) There is no "continuing trend" of lengthening golf courses and in fact there appears to be a shortening trend.

iv) Stakeholders do not see distance as a problem or threat and do not want to see the status quo disrupted.

v) Existing equipment regulations have effectively balanced tradition and technology, as it relates to distance. However, continued innovation of other equipment performance attributes provides an important stimulous to the games overall appeal for current and future golfers.

Acushnet has historically and intends to continue to conduct itself in the best interests of the game. It is in our DNA and it is also in our own commercial interest. We have also been a cooperative partner with the GB's and other stakeholders in the dialogs and processes around equipment regulation and other issues. It is our intention to remain in that posture. However, we strongly believe that rather than proceeding with the announced NC and AI process, there should be an opportunity for all stakeholders to participate in meaningful examination and dialog around the Report and the research and data underpinning it. This submission is presented as our initial effort to promote that engagement.

Respectfully, Acushnet Company

Appendix – List of Figures

Page 13	Figure 10 – Report P.46, Figure 39 Increasing length of PGA Tour events from 1929 to 2018.
Page 14	Figure 11 – Report P.47, Figure 40 Average playing length of European Tour courses over time.
Page 15	Figure 12 – Library R14, P.21, Figure 11 Percentiles of PGA Tour hole lengths from 2004 to 2018 with 10, 25, 50 (i.e., median), 75 and 90 percentiles shown.
Page 17	Figure 13 – Report P.87, Figure 75 Attitudes to distance – the golf course
	Figure 14 – Report P.90, Figure 78 Impacts of recreational golfer hitting distances
Page 19	Figure 15 – Report P.54, Figure 45 Playing Lengths of the second longest tees: 1950's to 2010's
Page 20	Figure 16 – Report P.54, Figure 46 USA Golf Course Playing length by decade – most forward tee
Page 24	Figure 17 – Data made available by the PGA Tour
	Figure 18 – Report P.79, Figure 66 Attitudes to distance: contributing factors
Page 26	Figure 19 – Report P.66, Table5 Comparison of fairway acreage by decade opened (80 U.S. course sample)
Page 29	Figure 20 – Submission P.16, Figure 4 Source: PGA Tour, Darrell Survey. Average size in volume of driver heads played on PGA Tour
	Figure 21 – Submission P.17, Figure 5 Sources: PGA Tour, Darrell Survey, Titleist
Page 30	Figure 22 – Data collected by Acushnet

Page 31 Figure 23 – Submission P.15, Figure 3
Source: T&L Magazine 2003

Figure 24 – Report P.80, Figure 67
Is distance in golf a "problem" overall?

Page 32 Figure 25 – Report P.82, Figure 69
Is distance in golf a threat or an opportunity

From: William Collis
Sent: Wednesday, February 3, 2021 6:46 AM
To: TestCenter <TestCenter@USGA.org>
Subject: Length Of Drivers..

Dear USGA,

I am old(ish) approaching 70. I have what in known as an "essential tremor". I have a serious twitch that is getting worse.

You have taken away my long putter and now you want to take away the 47.5 driver that allows me to hit a 200 yard drive.

Really.. people like me are the ones who are hurt by your regulations , not the pros!

Sincerely,

Bill

From: William Johnson
Sent: Tuesday, February 2, 2021 1:26 PM
To: TestCenter <TestCenter@USGA.org>
Subject: Proposed Changes to Equipment Standards

To whom it may concern,
I am in agreement with these resesonable proposals. As a 67 year old golfer and with 54 years of golf experience under my belt, I will gladly shorten my driver shaft from its current 48 inches to 46 inches and play by these proposed rules. And, as a retired golf course superintendent, I applaud your efforts as distance reduction/limitation is crucial to golf's long-term sustainability.

Respectfully yours,
William A. Johnson CGCS Retired

P.O. Box 82000
Phoenix, Arizona
85071-2000

602-687-5000 phone
602-687-4482 fax
www.pinggolf.com

PING

A Karsten Subsidiary

March 4, 2021

John Spitzer
USGA, Research and Test Center
77 Liberty Corner Road
Far Hills, NJ 07931
Via email only: jspitzer@usga.org

Re: PING's Response to the USGA's February 1, 2021 Notice to Manufacturers of its "Proposed Model Local Rule (MLR) regarding Club Length Reduction to 46 inches"

Dear Mr. Spitzer:

Thank you for your February 1, 2021 invitation to submit questions and comments regarding the USGA's February 1, 2021 Notice to Manufacturers of its "Proposed Model Local Rule (MLR) regarding Club Length Reduction to 46 inches" (the "MLR 46" Max Club Length Proposal"). As you know, on December 21, 2016 PING provided the USGA with written comments regarding the USGA's similar October 17, 2016 Notice to Manufacturers regarding maximum club length. As was true then, we remain opposed to the USGA/R&A proposal to reduce the maximum club length to 46 inches.

As is widely understood, it is very challenging for golfers to successfully use a driver longer than 46 inches (the club that is the primary target of the proposal). Only a very small percentage of golfers do so. This is also true for professionals and elite amateurs - the only group the USGA hopes will be impacted by this proposed MLR. Playing a long driver is a very difficult skill to master. The reward it offers comes with great risk. As a result, very few professional tour golfers have elected to put a driver longer than 46 inches in play. Nonetheless, we believe professional golfers should continue to have the choice whether to take on that risk. When a pro chooses to do so, those who are watching often find it very interesting to follow the outcome of such an attempt.

While we are opposed to the MLR 46" Max Club Length Proposal, we are appreciative that if adopted it is intended to only apply to professionals and elite amateurs. However, neither the USGA nor the R&A can be certain this limited application will be achieved. It would be unfortunate if this proposed MLR was more widely applied and was eventually used to deny a large number of amateurs the choice of playing a longer club - depriving them of the excitement that comes from taking on this challenge.

Currently, golf is growing. This growth benefits those who have recently returned to the game, as well as the many new golfers who are learning how enjoyable golf can be – especially during these challenging times. Of course, this growth is also of benefit to all of us who have worked for many years and in many ways to expand the game, including investing our limited time and resources in developing innovative products that help golfers better enjoy their time on the course. While we will timely be commenting later this year on your other proposals, it would be nice to see the USGA and R&A come forth with equipment proposals that can further grow enthusiasm and participation in the game and give golfers more choices. For example, when you allowed club adjustability, that was very positive for golfers. We greatly look forward to learning about your thoughts on such ideas and hope this topic will be appropriately considered by the USGA and the R&A.

We appreciate the opportunity to comment on your MLR 46" Max Club Length Proposal. We also thank you for acknowledging the obligation of the rule makers to adhere to the Equipment Rulemaking Procedures adopted in November of 2011. We look forward to studying and timely commenting on the other February 2, 2021 USGA proposals. In the meantime, please let us and all other interested parties know if there is any additional data or information available for review regarding any of the pending proposals, or if you have any information responsive to our above questions.

Sincerely,

John A. Solheim
Chairman and CEO, PING

John K. Solheim
President, PING