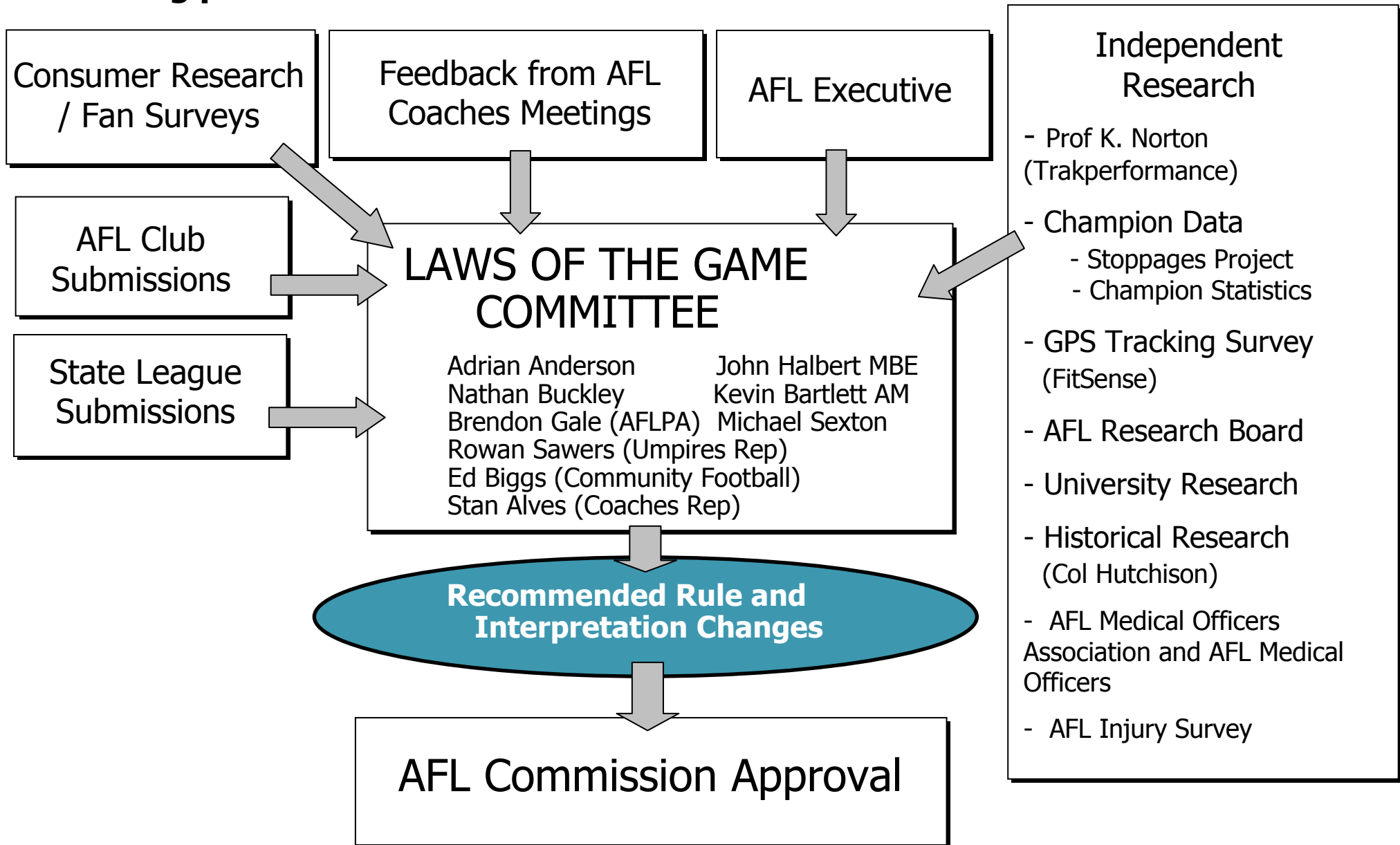


# **Laws of the Game**

## **Rule and Interpretation changes for 2006**

**November 2005**

# Recommended rule and interpretation changes have been agreed through the following process



# Overview

1. Trends in the game over the last 40 years
2. Recent trends in the game over the last 6 years (2000 to 2005)
3. The Laws of the Game Committee objectives
4. Impact of changes already made in the 2005 Premiership season
5. Rule and interpretation changes for 2006

## Over the last four decades, the game has trended towards a significantly higher speed but in a more stop-start, less continuous fashion

Over the last four decades...

- The total number of stoppages has increased
- The total amount of stoppage time has increased
- As a result, the total time the ball is in play has declined

- The number of individual plays has increased
- The average time per individual play has decreased
- So when in play, the players and the ball move faster
- Fitter and stronger players are capable of making more contests and more severe collision impact

**A more stop-start, less continuous style of game**

**Shorter, more intense bursts of play**

- More stop periods enables more player density around the ball, particularly at stoppages
- Higher risk of high impact collision injuries
- Less positional play and other changes in how the game is played

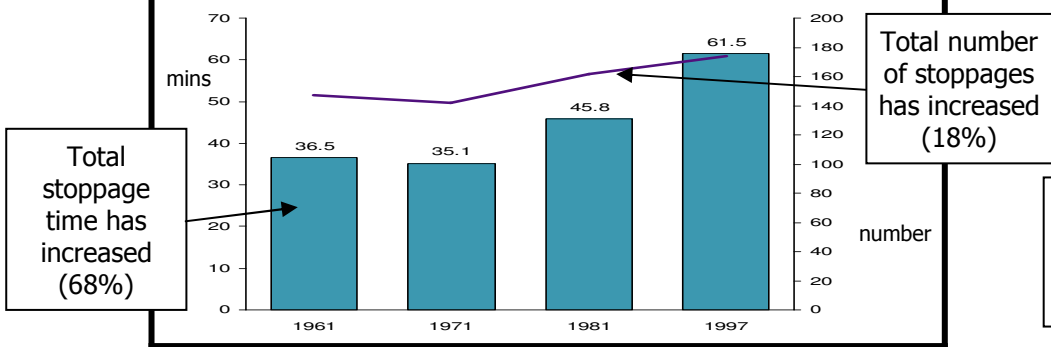
*Source: Norton, The Evolution of Australian Football and subsequent research*

# These insights are supported by analysis of four Grand Finals from 1961 to 1997

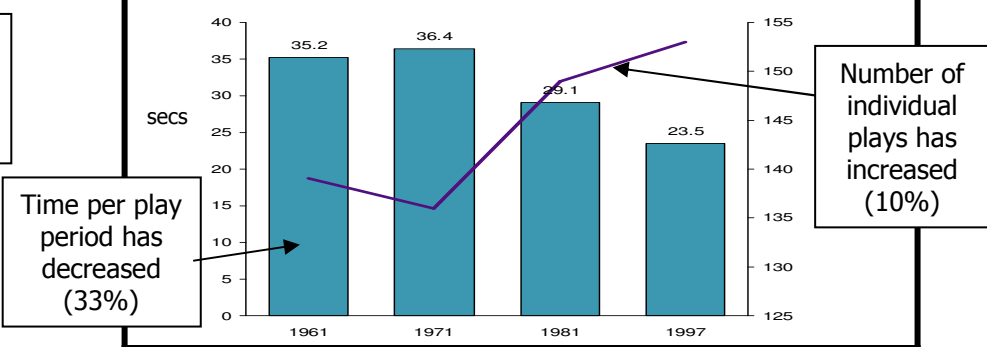
Total game time has remained relatively static at around 120 minutes

But..

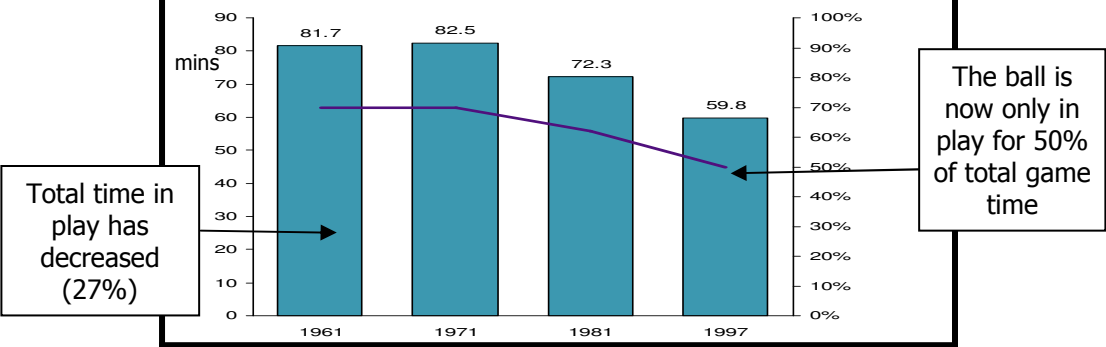
**Total number of stoppages and total stoppage time has increased**



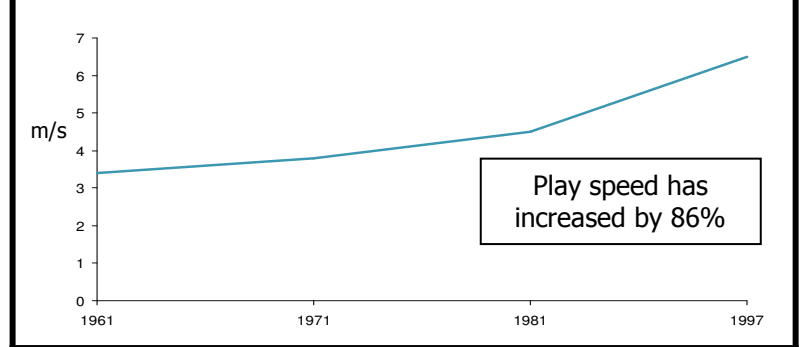
**Each play is of shorter duration and there are more individual play periods**



**Total time in play (mins) and the % of time the ball is in play has decreased**



**But, when the ball is in play, the players and the ball move faster**



Source: Norton analysis including 4 Grand Finals – 1961, 1971, 1981 and 1997

## Changes in key statistics have driven the increase in stoppages and the increase in stoppage time

Key Statistic			1961	1971	1981	1997	Trend	% Change
<b>Umpire Bounces around the ground</b>	Significantly higher number of bounces around the ground and much more time taken to bounce	Number of bounces	11	13	22	30	↑	172%
		Time taken to bounce (secs)	8.5	6.6	10.1	14.2	↑	67%
<b>Centre bounces</b>	Significantly more time taken to bring ball back to the Centre after a goal	Time taken for a centre bounce (secs)	26.6	29.5	36.6	39.6	↑	49%
<b>Out of bounds</b>	Lower numbers of out of bounds, but more time taken for umpires to throw the ball back into play	Time taken to throw in (secs)	10.1	8.5	11.6	12.6	↑	25%
<b>Set shots at goal</b>	More set shots at goal and significantly more time taken to have shot	Time taken to have shot (secs)	17.6	20.1	18.8	27.1	↑	54%
<b>Free kicks</b>	Significantly less free kicks paid	Number of Free kicks	74	89	56	25	↓	(66%)

Source: Norton analysis of 4 Grand Finals – 1961, 1971, 1981 and 1997

## Over the last 6 years there has been a strong trend towards increased player density around the ball and a shorter, more possession style of play

### When in possession

- An emphasis on retention of possession
- A reluctance to kick the ball to contests
- Less long kicking, more short kicking
- Less contested marks
- A trend in some clubs to push extra numbers back and then kicking to player up field leading toward boundary

### When in defence/ in dispute


- Increased number of players around the ball at stoppages
- Increased non clearance rates from bounces around the ground and throw ins
- A higher incidence of defensive flooding / extra numbers in defence
- Increased prevalence of defensive zoning particularly at kick ins
- Greater focus on defensive skills (tackling, spoiling etc)

## Statistics from Champion Data clearly show the increasing trend towards more short kicking and less contested marking


**Average Kicks per game (Premiership Season)**

Year	Long Kicks	Short Kicks
2000	184	126
2001	178	131
2002	170	125
2003	163	131
2004	145	134
2005	141	154

Long kicks have decreased 23%




Short kicks have increased 22%




**Average Marks per game (Premiership Season)**

Year	Contested Marks	Uncontested Marks
2000	26	140
2001	26	140
2002	25	133
2003	25	140
2004	22	144
2005	19	164

Contested marks have decreased 27%



Uncontested marks have increased 17%



Source: Champion Data 2000 to 2005

**In addition, the statistics also show the trend towards lower clearance rates at stoppages as player density has increased**

**Champion Statistics - Average Stoppages and Non Clearance rates per game (Premiership Season)**

Year	Centre Bounce		Bounce Around Ground		Boundary Throw Ins		All stoppages	
	Average Number	<u>Non</u> Clearance rate	Average Number	<u>Non</u> Clearance rate	Average Number	<u>Non</u> Clearance rate	Average Number	<u>Non</u> Clearance rate
<b>2000</b>	34	9.5%	18	15.8%	36	14.2%	87	12.7%
<b>2001</b>	32	12.8%	21	21.7%	37	21.5%	90	18.5%
<b>2002</b>	31	17.7%	27	25.7%	36	26.5%	94	23.4%
<b>2003</b>	31	18.8%	29	24.7%	31	25.2%	91	22.8%
<b>2004</b>	30	19.3%	28	25.2%	29	25.8%	88	23.4%
<b>2005</b>	<b>31</b>	<b>14.3%</b>	<b>19</b>	<b>19.4%</b>	<b>30</b>	<b>21.8%</b>	<b>79</b>	<b>18.3%</b>

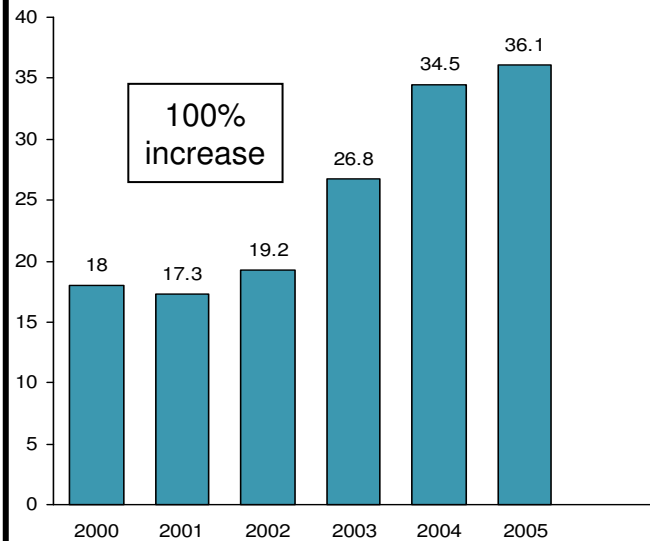
*Source: Champion Data 2000 to 2005*

# We have also seen a trend towards significantly higher rotation of players on and off the interchange bench

Greater use of the interchange bench / more rotation

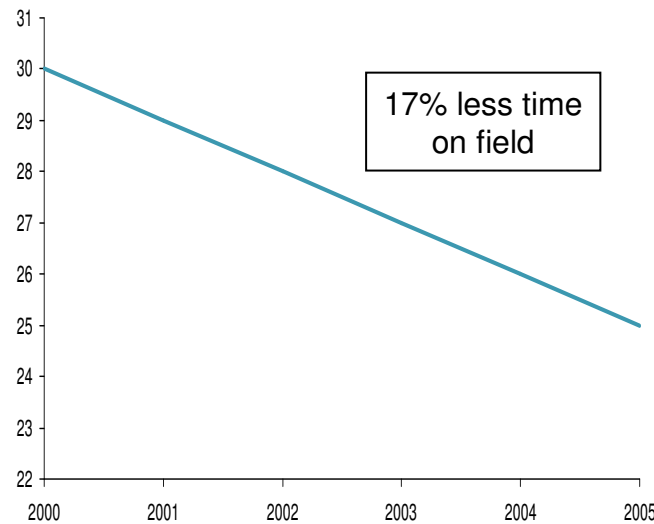
Less time spent on field per player

Average use of interchange bench per club, per game – H&A season



- "In 2001, prime mid fielders covered an average of 17km per game – In 2005 the average was closer to 13km"

Average time on ground per quarter (mins) for selected mid fielders



- "In 2000, 66% of all midfielders spent the entire game on the ground – our most recent data from 2004-05 shows that this figure is now less than 20%"

"The additional rest players are getting when taken off the ground allows them to work harder (run faster and longer) once they return to the field."

This leads to:

- More ability to get to contests
- Harder collisions
- More congestion
- Game played at higher intensity when ball is in play

Source: Champion Data, University Research, Norton, GPS Tracking Survey - Wisby (FitSense), Research Board Project - Brian Dawson

## Analysis from our GPS tracking study indicates that one third of total playing time is of high intensity

- The average work to rest ratio across all positions is 1:2.2, indicating that for every one minute of running there will be 2mins 12secs of rest (very slow running speeds, walking or stationary)
- The average work to rest ratio for midfielders is 1:2.0
- "This highlights the large amount of recovery time available during an AFL game"
- In 2005, the average distance covered by players across all positions was 12.5km

	Forwards	Mid Fielders	Defenders
Total Distance (Km)	11.95km	12.93km	12.12km

- This is less than distances previously assessed for midfielders, but the intensity during on field playing periods is increasing. Forwards and defenders are covering more ground than previously assessed.

Source: GPS Tracking Study - Wisby, FitSense Australia

# Injury rates have declined for most injury types, but rate of collision injuries remains steady

**Injury Incidence – All Injuries**

Average number of new injuries per team per season				
Year	1998	2000	2002	2004
<b>Shin / Ankle / Foot</b>	8.7	7.7	7.4	6.6
<b>Hip / Groin / Thigh</b>	7.8	6.5	6.9	6.4
<b>Hamstring</b>	6.4	5.8	4.5	6.3
<b>Knee</b>	4.9	5.3	5.1	4.4
<b>Shoulder / Arm / Elbow</b>	2.8	3.1	3.2	3.4
<b>Trunk / Back</b>	3.0	3.4	2.1	2.9
<b>Other</b>	6.7	5.6	5.1	4.9
<b>Total injuries per Club</b>	<b>40.3</b>	<b>37.4</b>	<b>34.3</b>	<b>34.9</b>

**Injury Incidence – Collision Injuries**

Average number of new injuries per team per season				
Year	1998	2000	2002	2004
<b>Facial Fractures</b>	0.7	0.7	0.4	0.8
<b>Concussion</b>	0.7	0.6	0.7	0.3
<b>Shoulder Sprains and Dislocations</b>	0.9	0.7	0.9	1.0
<b>A/C Joint Injuries</b>	0.9	1.3	1.1	1.1
<b>Fractured clavicles</b>	0.4	0.5	0.3	0.6
<b>Forearm/ wrist / hand fractures</b>	1.7	1.4	1.1	1.1
<b>Lumbar and thoracic spine injuries</b>	1.6	2.2	0.9	1.7
<b>PCL Knee</b>	1.3	0.9	0.9	0.7
<b>Total injuries per Club</b>	<b>8.2</b>	<b>8.3</b>	<b>6.3</b>	<b>7.3</b>

If play becomes more continuous then the number and force of collisions will decline

Source: AFL Injury Report 2004, Norton et al

# Our core objective is to maintain and enhance the appeal of our game

## Primary Focus



### 1. Trend back to more continuous play

- Results in less player density around the ball
- And reducing high impact collision injuries

## Secondary Focus



### 2. Enhance / encourage traditional highlights of the game

- One on one contests
- Contested marks
- Positional play

# Over the 2005 Premiership season, we have helped deliver a more continuous style of play with less injuries

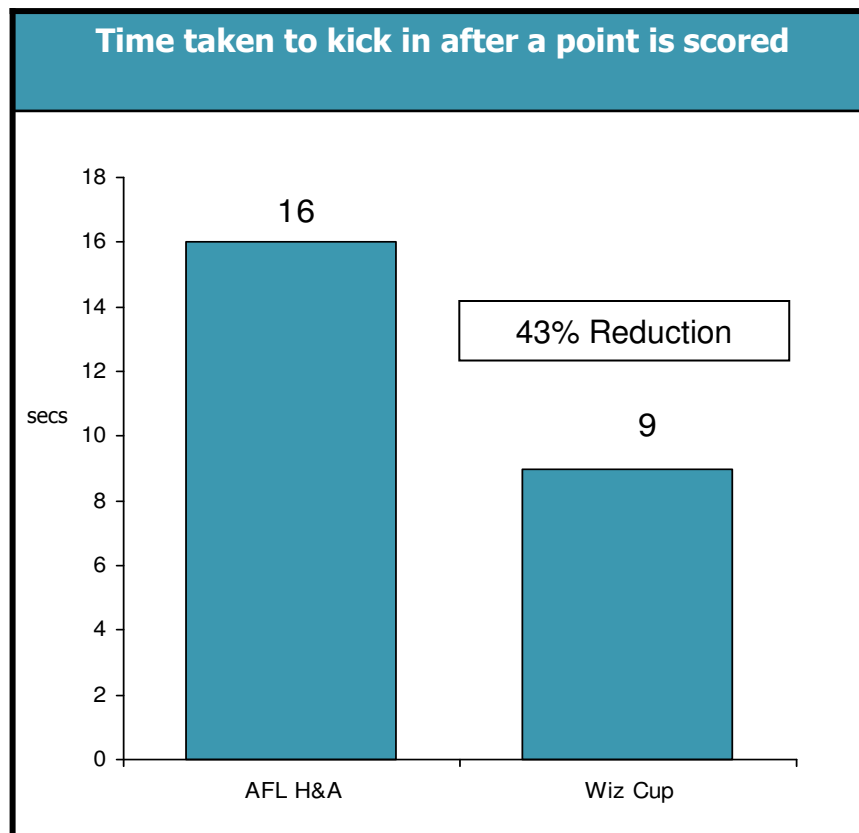
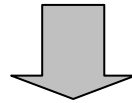
Area	Change	Effect
1. <u>Ruck Contests</u>	<ul style="list-style-type: none"> <li>- Centre circle to control length of run up together with stricter policing of use of knees in ruck contests</li> </ul>	<ul style="list-style-type: none"> <li>- Reduction in average of 3 PCL injuries in centre bounce ruck contests per annum to only 1 minor injury in 2005</li> <li>- Improvement in centre bounce clearance rates</li> </ul>
2. <u>Holding the ball</u>	<ul style="list-style-type: none"> <li>- Allow time for ball to spill free</li> <li>- Interpretation of "Prior Opportunity"</li> <li>- Interpretation of "Reasonable time"</li> </ul> <p>(Diving on ball/dragging in remains the same)</p>	<ul style="list-style-type: none"> <li>- 36% reduction in ball-ups around the ground</li> <li>- Non clearance rates have reduced from 23.4% to 18.4%</li> <li>- More continuous play</li> </ul>
3. <u>Time allowed after marks &amp; free kicks</u>	<ul style="list-style-type: none"> <li>- Reduce time allowed for players to dispose of ball after mark and free kicks</li> </ul>	<ul style="list-style-type: none"> <li>- More continuous play</li> <li>- Reduce player density</li> </ul>
4. <u>Chopping arms</u>	<ul style="list-style-type: none"> <li>- Offence of chopping arms written into law book</li> </ul>	<ul style="list-style-type: none"> <li>- Protection of marking player</li> </ul>
5. <u>Holding up a player after a mark</u>	<ul style="list-style-type: none"> <li>- 50m penalty against opponent not involved in the contest who holds player up after mark / free kick</li> </ul>	<ul style="list-style-type: none"> <li>- More continuous play</li> <li>- Reduce opportunity for defensive flooding</li> </ul>

## For the 2006 Premiership season, the AFL Commission has approved the following rule changes

Proposed Rule Changes		Rationale
<b>Rule Changes</b>	<b>1. Remove requirement to wait for flags to be waved before bringing the ball back into play after a point</b>	<ol style="list-style-type: none"> <li>1. More continuous play</li> <li>2. Reduced capacity to set up zones</li> <li>3. 1942 rule change to help goal umpires (no longer needed)</li> <li>4. Improve flow of game, less chips to static player in back pocket</li> <li>5. Positive effect on restart time as demonstrated in Wizard Cup (see next page)</li> </ol>
	<b>2. Allow shot on goal from directly in front if mark taken or free kick awarded in goal square</b>	<ol style="list-style-type: none"> <li>1. Alistair Lynch example – Brisbane v Adelaide, Final 2003</li> <li>2. Reduce time taken to line up for goal (more continuous play)</li> <li>3. Rewards mark / free kick in goal square</li> <li>4. Successful trial in Wizard Cup</li> </ol>
	<b>3. Automatic restart of 'Time On' from the time umpire crosses arms to when the ball is bounced / thrown up</b>	<ol style="list-style-type: none"> <li>1. Increase accuracy and consistency of measurement of "time on"</li> <li>2. Decrease the margin for human error by time keepers</li> <li>3. Trialled in 2005 finals series</li> </ol>

# The positive effect of the recommended major rule change has been proven in Wizard Cup 2005

1. Remove requirement to wait for flags to be waved before bringing the ball back into play after a point



Source: Norton 2003 - 2005

**For the 2006 Premiership season, the AFL Commission has approved the following interpretation changes**

Proposed Interpretation Changes		Rationale
Interp- retation changes	<b>1. Limit time for players to line up for set shots on goal (play on after warning and 30 seconds)</b>	1. More continuous game / Improve flow of game 2. Reduce time wasting 3. Most players already well within this limit
	<b>2. Reduced tolerance for holding players up after mark or free kick (50m penalty)</b>	1. More continuous game / Improve flow of game 2. Reduce time wasting 3. Reduced capacity for defensive flooding after mark or free kick
	<b>3. Quicker boundary throws ins</b>	1. More continuous game / Improve flow of game
	<b>4. Less time taken to award 50m penalty</b>	1. More continuous game / Improve flow of game 2. Reduced capacity for flooding after 50m
	<b>5. Stricter interpretation for deliberate kick out of bounds</b>	1. More continuous game / Improve flow of game 2. Reduce time wasting 3. Disincentive to increase numbers behind the ball and 'kick for touch'
	<b>6. Stricter policing of holding and blocking in marking contest</b>	1. Protection of marking player 2. Reduce illegitimate defensive 'scragging'
	<b>7. Focus on detection of infringements by taggers</b>	1. Protection of player going for the ball 2. Reduce illegitimate defensive 'scragging'