

20 November 2018 – FOR IMMEDIATE RELEASE

EASTLINK'S 2018 ANNUAL VICTORIAN SELF-DRIVING CAR SURVEY

Compared to last year, fewer motorists want a fully self-driving car, while more motorists want the latest driver assistance features like lane departure warning, lane keeping assistance, adaptive cruise control and automatic emergency braking.

A significant proportion of motorists expect that fully self-driving vehicles should be absolutely 100% safe with no possibility of ever being involved in a collision, even though this is an unrealistic expectation.

The desirability of hybrid and fully electric cars has increased further, with hybrid power now rivalling traditional petrol combustion.

More motorists think it's unfair that electric vehicles avoid fuel tax compared to those who think it's fair. More motorists think fuel tax should be replaced by a per-kilometre road use charge compared to those who prefer the status quo. The majority of motorists think any future road use charge should provide a discount for electric vehicles to encourage take-up.

EastLink with support from ARRB has now completed the second Annual Victorian Self-Driving Vehicle Survey.

EastLink Corporate Affairs and Marketing Manager Doug Spencer-Roy said, "More than 18,000 Victorian motorists fully completed the survey this year, which is a 20% increase on last year."

"The EastLink survey continues to be one of the world's largest surveys of motorists' attitudes to self-driving and driver assistance technologies, vehicle connectivity, electric power and road use charging – technologies which are expected to converge in cars of the future," he continued.

Compared to last year's survey, although more respondents can imagine using hands-off driving on a freeway, fewer respondents want their next vehicle to be capable of fully self-driving.

Doug Spencer-Roy explained, "This reduction in desirability for fully self-driving vehicles indicates that expectations had become over-inflated by hype, and people are

now becoming more realistic.”

Eight in ten survey respondents would travel as a passenger in a fully self-driving car where the vehicle has a driver who is monitoring and able to take over control. However, the majority of respondents would not yet travel as a passenger in a fully self-driving car where the vehicle is completely driver-less and there are no driving controls.

A significant proportion of respondents – 37% of female and 28% of male – expect that fully self-driving vehicles should be absolutely 100% safe with no possibility of being involved in a collision.

“When it comes to minimum acceptable safety, a significant proportion of people have unrealistic, unachievable expectations, which will be a significant hurdle for the autonomous vehicle industry to overcome,” said Doug Spencer-Roy.

In contrast to these mixed results for fully self-driving cars, usage of, and demand for the latest safety and driver assistance features has increased in almost all cases compared to last year, with larger increases seen among female respondents.

Doug Spencer-Roy explained, “EastLink anticipates that widespread adoption and use of the latest safety and driver assistance features – such as lane departure warning, lane keeping assistance, adaptive cruise control and automatic emergency braking – will significantly improve road safety by reducing the number and severity of crashes.”

“These survey results support EastLink’s expectation that these features will become commonplace before fully autonomous vehicles.”

Compared to last year, demand for connected car features is largely unchanged. A clear majority of male and female respondents still “definitely want” their next car to be connected to a data network for traffic warnings, road condition warnings and vehicle security features.

“This demonstrates the importance of EastLink’s trials of 5.9GHz infrastructure to vehicle communications which started this year,” said Doug Spencer-Roy.

Respondents are now even more likely to prefer hybrid power or 100% electric for their next vehicle. Only 39% of respondents are considering a traditional petrol combustion drivetrain for their next vehicle, whereas 80% of respondents have that option in their current vehicle.

For further information:

DOUG SPENCER-ROY
Corporate Affairs & Marketing
Manager
ConnectEast Group
T 03 9955 1700
M 0439 940 530
dsroy@connecteast.com.au



Doug Spencer-Roy said, “This year’s survey shows that the preference for hybrid power has increased and now rivals the preference for traditional petrol combustion power. The preference for 100% electric has also increased.”

Hydrogen fuel cell electric vehicles may become a popular option for 100% electric cars in Australia, with the potential ability to quickly top up Hydrogen at service stations eliminating “range anxiety”. However, there is a significant awareness gap. While only 8% of respondents are unaware of battery electric vehicles, five times that proportion are unaware of hydrogen fuel cell electric vehicles.

“Manufacturers and other stakeholders should raise awareness of hydrogen fuel cell electric vehicles, to help with its emergence as a practical option for 100% electric vehicles in Australia,” recommended Doug Spencer-Roy.

Significantly more respondents think it is not fair that fully electric vehicles use roads without incurring any fuel tax compared to those who think it is fair.

Slightly more respondents think fuel tax should be replaced by a per-kilometre road use charge that every vehicle is charged compared to those who prefer the status quo. However nearly one in four respondents are undecided at this time.

If a road use charge is introduced by Governments in the future:

- a large majority of respondents think off-peak trips should cost less per kilometre than peak period trips; and
- more than half of respondents think fully electric vehicles should get a discount to encourage take up of fully electric vehicles, while less than a third think there should be no discount for fully electric vehicles.

About EastLink

www.eastlink.com.au

EastLink’s 40 kilometre road network is the largest privately operated freeway network in Victoria, Australia. EastLink is the major north-south transport artery in Melbourne’s east, connecting the Eastern, Monash, Frankston and Peninsula Link freeways. EastLink is Melbourne’s fastest road and safest freeway, with traffic averaging 250,000 vehicles per day.

In 2018, the internationally recognised sustainability assessment agency, GRESB, awarded EastLink the top 5 Star sustainability rating for the third consecutive year and ranked EastLink #5 globally of 280 infrastructure entities.

For further information:

DOUG SPENCER-ROY
Corporate Affairs & Marketing
Manager
ConnectEast Group
T 03 9955 1700
M 0439 940 530
dsroy@connecteast.com.au



SURVEY RESULTS

About the survey

- 18,010 motorists fully completed the survey (compared to 15,047 last year).

Hands-off driving and fully self-driving

In the future, could you imagine using hands-off driving on a freeway?				
	MALE		FEMALE	
	2018	2017	2018	2017
Definitely	44%	42%	20%	20%
Maybe	37%	36%	47%	43%
Definitely not	15%	18%	23%	26%
Don't know	4%	4%	11%	11%

- Compared to last year, more male and female respondents can imagine using hands-off driving on a freeway or tollway.
- Male respondents are still more than twice as likely to say they can definitely imagine using hands-off driving on a freeway or tollway (44% of males versus 20% of females).
- There are still more female respondents who can definitely not imagine hands-off driving (23%) than female respondents who can definitely imagine it (20%).

Which of the following fully self-driving functions would you want in your NEXT vehicle?				
	MALE		FEMALE	
	2018	2017	2018	2017
Fully self-driving on all roads Vehicle can drive itself on all roads	29%	35%	17%	22%
Fully self-driving on freeways only Vehicle can drive itself along freeways and tollways	n/a	42%	n/a	28%
Fully self-driving on freeways only - driver must continuously monitor the vehicle at ALL times Vehicle can drive itself along freeways and tollways but driver needs to continuously monitor the vehicle to take back control immediately if the vehicle encounters a condition it cannot manage	37%	n/a	27%	n/a
Fully self-driving on freeways only - driver does not need to monitor but the vehicle may ask the driver to take back control Vehicle can drive itself along freeways and tollways but driver needs to be ready to take back control within a few seconds if the vehicle requests that	33%	n/a	21%	n/a

Question changed from 2017 to 2018 survey

For further information:

DOUG SPENCER-ROY
Corporate Affairs & Marketing
Manager
ConnectEast Group
T 03 9955 1700
M 0439 940 530
dsroy@connecteast.com.au



- Compared to last year, fewer respondents – both male and female – want fully self-driving in their next vehicle.
- This is the case for fully self-driving on freeways only, as well as for fully self-driving on all roads.

Safety and self-driving cars

If you were given the opportunity to travel as a passenger in a fully self-driving car on a freeway among other traffic, would you do it?				
	MALE		FEMALE	
	2018	2017	2018	2017
The vehicle has a driver who is monitoring and able to take over control:				
Yes	84%	n/a	80%	n/a
No	16%	n/a	20%	n/a
The vehicle is completely driver-less and there are no driving controls:				
Yes	43%	n/a	23%	n/a
No	57%	n/a	77%	n/a

New question in the 2018 survey

- Eight in ten respondents – both male and female – would travel as a passenger in a fully self-driving car where the vehicle has a driver who is monitoring and able to take over control.
- However the majority of respondents – both male and female – would not travel as a passenger in a fully self-driving car where the vehicle is completely driver-less and there are no driving controls.
- Furthermore, compared to male respondents, female respondents are significantly less likely to want to travel as a passenger in a fully self-driving car where the vehicle is completely driver-less and there are no driving controls

What are your expectations of the MINIMUM level of safety that should be provided by fully self-driving vehicles?				
	MALE		FEMALE	
	2018	2017	2018	2017
As safe as a human driver	11%	n/a	10%	n/a
Safer than a human driver	33%	n/a	30%	n/a
Extremely unlikely to be involved in any type of collision	27%	n/a	23%	n/a
100% safe - will never be involved in a collision	28%	n/a	37%	n/a

New question in the 2018 survey

- A significant proportion of respondents – 37% of female and 28% of male – expect that self-driving vehicles should be fully 100% safe and will never be involved in a collision.

For further information:

DOUG SPENCER-ROY
 Corporate Affairs & Marketing
 Manager
 ConnectEast Group
 T 03 9955 1700
 M 0439 940 530
 dsroy@connecteast.com.au



Safety and driver assist functions – current vehicle

Does your CURRENT vehicle have any of the following safety or driver assist functions? If so, do you use them?						
	MALE			FEMALE		
	2018		2017	2018		2017
	Yes, but I don't use it	Yes, and I use it	Yes, and I use it	Yes, but I don't use it	Yes, and I use it	Yes, and I use it
Cruise control Set the speed for the vehicle to maintain	10%	77%	76%	22%	58%	56%
Adaptive cruise control Set the speed for your vehicle to maintain, subject to keeping a set distance from the vehicle in front of you	3%	15%	13%	6%	10%	8%
Collision warning Warning given if an imminent collision is detected	1%	18%	13%	1%	12%	8%
Blind spot warning Warning given if there is a vehicle in your rear view mirror blind spot	0.5%	16%	13%	0.6%	12%	9%
Speed sign recognition Vehicle reads speed signs	2%	9%	5%	2%	9%	6%
Lane departure warning Warning given when vehicle tyre veers onto line marking	2%	13%	10%	1%	8%	6%
Lane keeping assistance Vehicle can automatically steer itself within the painted lines of a freeway lane	1%	7%	5%	0.8%	4%	2%
Automatic lane changing Vehicle will automatically change lanes on a freeway, if safe, upon indicating by driver	0.4%	0.9%	0.7%	0.3%	0.7%	0.4%
Automatic braking Vehicle will automatically brake if an imminent collision is detected	2%	13%	10%	2%	8%	5%
Active parking assistance Vehicle can automatically steer itself into a parking space	5%	5%	5%	3%	3%	2%

- Compared to last year, in almost all cases male and female respondents are more likely to have and to use the latest safety and driver assistance functions in their vehicle.
- However female respondents continue to be significantly less likely to have the latest safety and driver assist functions in their vehicle.
- Should vehicle manufacturers do more to encourage female motorists to want the latest safety and driver assistance functions in their vehicles, for example by better educating female motorists about the benefits and usage of these functions?

For further information:

DOUG SPENCER-ROY
Corporate Affairs & Marketing
Manager
ConnectEast Group
T 03 9955 1700
M 0439 940 530
dsroy@connecteast.com.au



Safety and driver assist functions – next vehicle

Which of the following automated functions would you want in your NEXT vehicle?				
	MALE		FEMALE	
	2018	2017	2018	2017
Cruise control Set the speed for the vehicle to maintain	87%	88%	81%	81%
Adaptive cruise control Set the speed for your vehicle to maintain, subject to keeping a set distance from the vehicle in front of you	80%	79%	69%	66%
Collision warning Warning given if an imminent collision is detected	81%	79%	82%	79%
Blind spot warning Warning given if there is a vehicle in your rear view mirror blind spot	86%	85%	88%	86%
Speed sign recognition Vehicle reads speed signs	73%	69%	74%	66%
Lane departure warning Warning given when vehicle tyre veers onto line marking	74%	70%	69%	62%
Lane keeping assistance Vehicle can automatically steer itself within the painted lines of a freeway lane	62%	62%	53%	48%
Automatic lane changing Vehicle will automatically change lanes on a freeway, if safe, upon indicating by driver	42%	45%	33%	33%
Automatic emergency braking Vehicle will automatically brake if an imminent collision is detected	80%	78%	77%	71%
Active parking assistance Vehicle can automatically steer itself into a parking space	64%	65%	69%	67%

- Compared to last year, demand for the latest safety and driver assistance features has increased in almost all cases – with larger increases seen among female respondents
- Among female respondents, the biggest increases are for: speed sign recognition (+8%); lane departure warning (+7%); automatic emergency braking (+6%); lane keeping assistance (+5%); collision warning (+3%); adaptive cruise control (+3%).
- Among male respondents, the biggest increases are for: speed sign recognition (+4%); lane departure warning (+4%).

For further information:

DOUG SPENCER-ROY
Corporate Affairs & Marketing
Manager
ConnectEast Group
T 03 9955 1700
M 0439 940 530
dsroy@connecteast.com.au



Vehicle power

How is your current vehicle powered?		
	2018	2017
Petrol	80%	80%
Diesel	17%	17%
LPG	1.6%	2.1%
Hybrid	1.2%	1.5%
100% Electric (battery electric vehicle)	0.2%	0.3%

What power preference/s do you have for your NEXT vehicle?		
	2018	2017
Petrol	39%	40%
Hybrid	37%	34%
100% Electric (battery or hydrogen fuel cell)	27%	25%
Diesel	22%	24%
Don't know	18%	18%
Other	2%	3%

- Compared to last year, respondents are even more likely to prefer hybrid power or 100% electric for their next vehicle.
- Only 39% of respondents are now considering petrol drivetrain for their next vehicle, whereas 80% of respondents have that option in their current vehicle.
- Respondents' preferences for hybrid power and 100% electric in their next vehicle dramatically exceed respondents' current usage of these options:
 - Nearly four in ten respondents are now considering hybrid power as an option for their next vehicle (versus just 1% who have that option in their current vehicle).
 - More than a quarter of respondents are now considering 100% electric as an option for their next vehicle (versus just 0.2% who have that option in their current vehicle).

Power preference/s for NEXT vehicle by when respondents expect to get their NEXT vehicle:			
	Within next few years	5 years	10 years
Petrol	45%	36%	32%
Hybrid	38%	40%	39%
100% Electric	24%	32%	38%
Diesel	25%	21%	17%
Don't know	13%	18%	21%
Other	2%	2%	2%

- The further into the future the respondent expects to get their next vehicle, the less likely they are considering petrol or diesel drivetrains as an option.
- The further into the future the respondent expects to get their next vehicle, the more likely they are considering 100% electric as an option.
- Do these results mean that Australia is now ready to set a final date for the sale of new petrol/diesel cars in favour of hybrid and 100% electric vehicles as has been done elsewhere (for example in Norway, UK, France and China)?

For further information:

DOUG SPENCER-ROY
 Corporate Affairs & Marketing
 Manager
 ConnectEast Group
 T 03 9955 1700
 M 0439 940 530
 dsroy@connecteast.com.au



Are you aware of these types of fully electric vehicle?				
	YES		NO	
	2018	2017	2018	2017
Battery electric vehicle	92%	n/a	8%	n/a
Hydrogen fuel cell electric vehicle	61%	n/a	39%	n/a

New question in the 2018 survey

- While only 8% of respondents are unaware of battery electric vehicles, five times that proportion are unaware of hydrogen fuel cell electric vehicles.

Connected vehicles

Do you want your NEXT vehicle to be connected to a data network for the following reasons?				
	DEFINITELY WANT IT			
	MALE		FEMALE	
	2018	2017	2018	2017
Traffic warnings Real time information on traffic congestion or road incidents	62%	62%	55%	54%
Road condition warnings Real time information about weather, roadworks and other road conditions	63%	63%	59%	58%
Vehicle security Ability to identify a stolen vehicle and disable it for recovery	69%	70%	61%	62%
Automatic emergency assistance Automatic contact to emergency services when the vehicle detects an accident	52%	51%	52%	51%
Entertainment Online music, podcasts, spoken books ...	39%	38%	43%	41%

- Compared to last year, demand for connected car features is largely unchanged.
- A clear majority of male and female respondents still “definitely want” their next car to be connected to a data network for traffic warnings, road condition warnings and vehicle security features.
- Half of male and female respondents still “definitely want” their next car to be connected to a data network for automatic emergency assistance.
- Four in ten male and female respondents still “definitely want” their next car to be connected to a data network for entertainment.

Road use charging

The price of petrol and diesel includes fuel tax. Fuel tax is approximately 41 cents per litre. Fuel tax revenue is used by our Governments to help fund road maintenance.		
	2018	2017
Now that you know this, do you think it's fair that fully electric vehicles use roads without incurring any fuel tax?		
Yes	37%	n/a
No	47%	n/a
Don't know	16%	n/a
Do you think it's fair that older less efficient petrol/diesel vehicles incur more fuel tax than modern petrol/diesel vehicles?		
Yes	39%	n/a
No	49%	n/a
Don't know	12%	n/a
Do you think fuel tax should be replaced by a per-kilometre road use charge that EVERY vehicle is charged? (trucks would pay more per kilometre than cars)		
Yes	40%	n/a
No	37%	n/a
Don't know	23%	n/a
If a road use charge is introduced by Governments in the future, do you think off-peak trips should cost less per kilometre than peak period trips?		
Yes	65%	n/a
No	21%	n/a
Don't know	14%	n/a
If a road use charge is introduced by Governments in the future, do you think fully electric vehicles should get a discount to encourage take up of fully electric vehicles?		
Yes	51%	n/a
No	32%	n/a
Don't know	17%	n/a

New question in the 2018 survey

- Significantly more respondents think it is not fair that fully electric vehicles use roads without incurring any fuel tax compared to those who think it is fair.
- Similarly, significantly more respondents think it is not fair that older less efficient petrol/diesel vehicles incur more fuel tax than modern petrol/diesel vehicles compared to those who think it is fair.
- Slightly more respondents think fuel tax should be replaced by a per-kilometre road use charge that every vehicle is charged compared to those who prefer the status quo.
- However nearly one in four respondents are unable to decide at this time.
- If a road use charge is introduced by Governments in the future, a large majority of respondents think off-peak trips should cost less per kilometre than peak period trips.
- If a road use charge is introduced by Governments in the future, more than half of respondents think fully electric vehicles should get a discount to encourage take up of fully electric vehicles, while less than a third think there should be no discount for fully electric vehicles.

For further information:

DOUG SPENCER-ROY
Corporate Affairs & Marketing
Manager
ConnectEast Group
T 03 9955 1700
M 0439 940 530
dsroy@connecteast.com.au

