Ph D Work in Progress Seminar
Dennis J. Puniard

"Surfing the Net to Find Cycling Nirvana: how cyclists use online technology to determine their travel destinations".

UNIVERSITY OF
CANBERRA
AUSTRALIA'S CAPITAL UNIVERSITY

The Journey Thus Far

- Commenced Full Time Feb 2007
- Rejoined the workforce in 2008-9 (14 Months as CEO of SSI) – went Part Time for Ph D
- Returned full time March 2010
- This is the third iteration of a topic on Cycle Tourism
  1. Road safety
  2. Rail Trails
  3. Online technology
- I am on my 4th Supervisor

"I once read that a man is never retired, only retreaded – in a different pattern"

- Sir Hubert Opperman (Oppy)
  - Opperman, H. (1977). <u>Pedals, Politics and People. Sydney, Haldane Publishing</u>

Supervisors

- **Primary**: Professor Keith Lyons, Director National Institute of Sports Studies

-

  Secondary: Associate Professor Tracey Dickson, Tourism Discipline

- **Advisor:** Professor Brent Ritchie, Deputy Head Tourism - University of Queensland

UNIVERSITY OF
CANBERRA
AUSTRALIA'S CAPITAL UNIVERSITY

Context of the Research

- Tourist Motivation and Destination Choice models (Moscardo 1995; Weaver 2006) can be adapted to the cycle tourism market and extrapolated to encompass cyclists' needs and motivations.

- These can also be used to investigate the information needs of cycle tourists and the means of delivery of this information explored.

- This research proposes a conceptual model built on previous research in this area but specifically modified to encompass cycle tourism.

UNIVERSITY OF
CANBERRA
AUSTRALIA'S CAPITAL UNIVERSITY

Scope of Research

- To develop and test cycle tourism and destination choice models to discover how cyclists in four distinct sectors of cycle tourism use the internet, social networking tools and online maps to make their choice of destination.

- (Ewing 2008)
    - concludes that 72.6% of Australians are current internet users,
    - 69% of users state that for general information the internet is important or very important.

- The most recent survey of cycle tourists (Faulks 2008) showed that 53% of those surveyed used the internet in planning their holiday, the single most important source identified.

Literatrue Review

- *Cycle tourism – its scope and size*

- *Tourist Motivation, Destination Choice and Cycle Tourists*

- Online technologies and information gathering for cycle tourists

Cycling Tourism

- **How big is Cycling?**
- **How many tourists are on bikes?**
- **How do they choose their cycling destinations?**
- **Some big numbers:**
  - Tour de France 500,000 plus spectators every day for 3 weeks
  - Tour Down Under (the Lance factor in 2009-10
    – 750,000 watched in person
    - (SA Gov ernment estimate)

UNIVERSITY OF
CANBERRA
AUSTRALIA'S CAPITAL UNIVERSITY

Cycling is the fourth most popular physical activity for adults and remains more popular than golf and tennis

(Australian Sports Commission 2009).

Top six adult physical activities

ACTIVITY	NO OF PARTICIPANTS	PARTICIPATION RATE
Walking	6,508,400	39.2%
Aerobics/Fitness	3,901,9 00	23.5%
Swimming	2,414,300	14.5%
Cycling	1,928,100	11.6%
Running	1,649,400	9.9%

UNIVERSITY OF
CANBERRA
AUSTRALIA'S CAPITAL UNIVERSITY

In 2009 Australians purchased over 1.17 million bicycles. 10th consecutive year in which Australians have bought more bicycles than cars. Over the last 7 years Australians have purchased 16.15 million bicycles compared to 7.25 million cars.

(Cycling Promotion Fund 2006; Cycling Promotion Fund 2010).

A significant contributor to this increase has been the number of women taking up cycling with 145,000 more women riding in 2010.

The largest growth is happening in the age group of 35 to 44 which has seen an increase of 88,000 people cycling since 2007.

Some key cycling events which have seen significant increases

EVENT	STATE	PARTICIPANTS	INCREASE FROM 2007
Around the Bay in a Day	Vic	16,300	16.4%
Sydney Spring Cycle	NSW	8,555	4.7%
Brisbane to the Gold Coast	QLD	7,800	35%
Mutual Community Challenge Tour (Tour down under)	SA	7,127	109.3%

UNIVERSITY OF
CANBERRA
AUSTRALIA'S CAPITAL UNIVERSITY

World Road Championships 2010

Geelong, Victoria in late September 2010.

(Hayes 2010)

- estimated 350,000 spectators over 5 days;
- 200,000 people attended on the Sunday (men's elite road race);
- estimated TV audience of 300 million worldwide; and,
- 1500 riders paid $165 each to "Ride the Worlds" before the pros.

There are 1,115 cycling organisations around Australia Cycling Promotion Fund (2009)

185 **local cycling organisations conducted**

8,154 **cycling activities - attracting more than**

45,000 **participants**

UNIVERSITY OF
CANBERRA
AUSTRALIA'S CAPITAL UNIVERSITY

Cycling is Big

In summary

➤ A significant proportion of the Australian population own bicycles - 16million bikes purchased since 2000;

➤ Over 1.9 million Australians used them in 2009;

➤ Over 10% of the population use them at least weekly;

➤ Lots of events for cyclists with some big participation events

➤ The Australian Capital Territory leads the nation in bicycle use. (24%)

Cycle Tourism

Definition

"cycle tourism visits are considered to be for the purpose of holidays, recreation, pleasure, or sport and to include either overnight stays or day trips to other tourism regions during which the visitor either engages in active cycling or is a spectator at a cycling event"

(South Australian Tourist Commission 2005)

UNIVERSITY OF
CANBERRA
AUSTRALIA'S CAPITAL UNIVERSITY

Beyond recreational

➤ **Challenge Events**

   Around the Bay in a Day,(16 000)

   Sydney to Gong,(10 000)

   Brisbane to Gold Coast (8,000)

➤ **MTB** - recreational , challenge and competition

   Scott 24 hr (2500),

   World Championships in Canberra Aug 2009

   2500 international competitors, 40,000 spectators

➤ **Road Racing** –International (Geelong 2010) 350 000 spectators

   national and state championships (Ballarat) 9 000 visitors

   many regional events

Elements of Cycle Tourism

The major cycling disciplines based on the number of participants are:

➢ Competitive road cycling events, including "challenge" events, and training activity associated with these;

➢ Competitive mountain bike events;

➢ Recreational road cycling including the use of dedicated or shared cycle paths;

➢ Recreational mountain biking – primarily off road;

Tourists go Online

The internet is now all invasive in our lives.

➢ **Travellers routinely use the internet for airline and accommodation bookings**

➢ **Proliferation of mobile devices such as laptops, PDA's and mobile telephones the internet is now accessible virtually anywhere.**

➢ **Online maps are available on all these mobile devices and linked to GPS are very powerful tools for the tourist.**

➢ **Social networking is BIG**

UNIVERSITY OF
CANBERRA
AUSTRALIA'S CAPITAL UNIVERSITY

Internet use by tourists (including cycle tourists)

It is now common practice to go online to:

- Search for information about destinations
- Research and book travel options (air, rail, bus, train)
- Book accommodation
- Research local attractions and events
- To do route planning - use of maps and linked attribute data

UNIVERSITY OF
CANBERRA
AUSTRALIA'S CAPITAL UNIVERSITY

Online search behaviour by Tourists

➤ **"demographic characteristics of gender, and household income and situational factors of trip purpose and travel party type were significantly related to tourists' choices of information sources"**

Luo, Feng and Cai (2004)

➤ **online security is a major issue for tourists**

Jang (2004)

"more research is needed into traveller's online attitude and search behaviour and online loyalty and the characteristics of repeat users are significant areas for more research."

Jang (2004)

UNIVERSITY OF
CANBERRA
AUSTRALIA'S CAPITAL UNIVERSITY

A fast moving environment

Published research in these areas is already outdated.

There is some useful research.

➤ Sigala (2004) expands upon concepts like "cyberculture" and "cyberpsychology".

➤ Frias (2008) offers some useful analysis on website design and cognitive processes in using websites.

➤ Brown (2003), in looking at mobile technologies, proposes that "good tourist technologies are not only those that make the tourist more efficient, but that also make tourism more enjoyable."

Social networking

- A social network service focuses on building online communities of people who share interests and/or activities, or who are interested in exploring the interests and activities of others.

- Social network services are web based (web 2.0) and provide a variety of ways for users to interact, such as e-mail and instant messaging services.

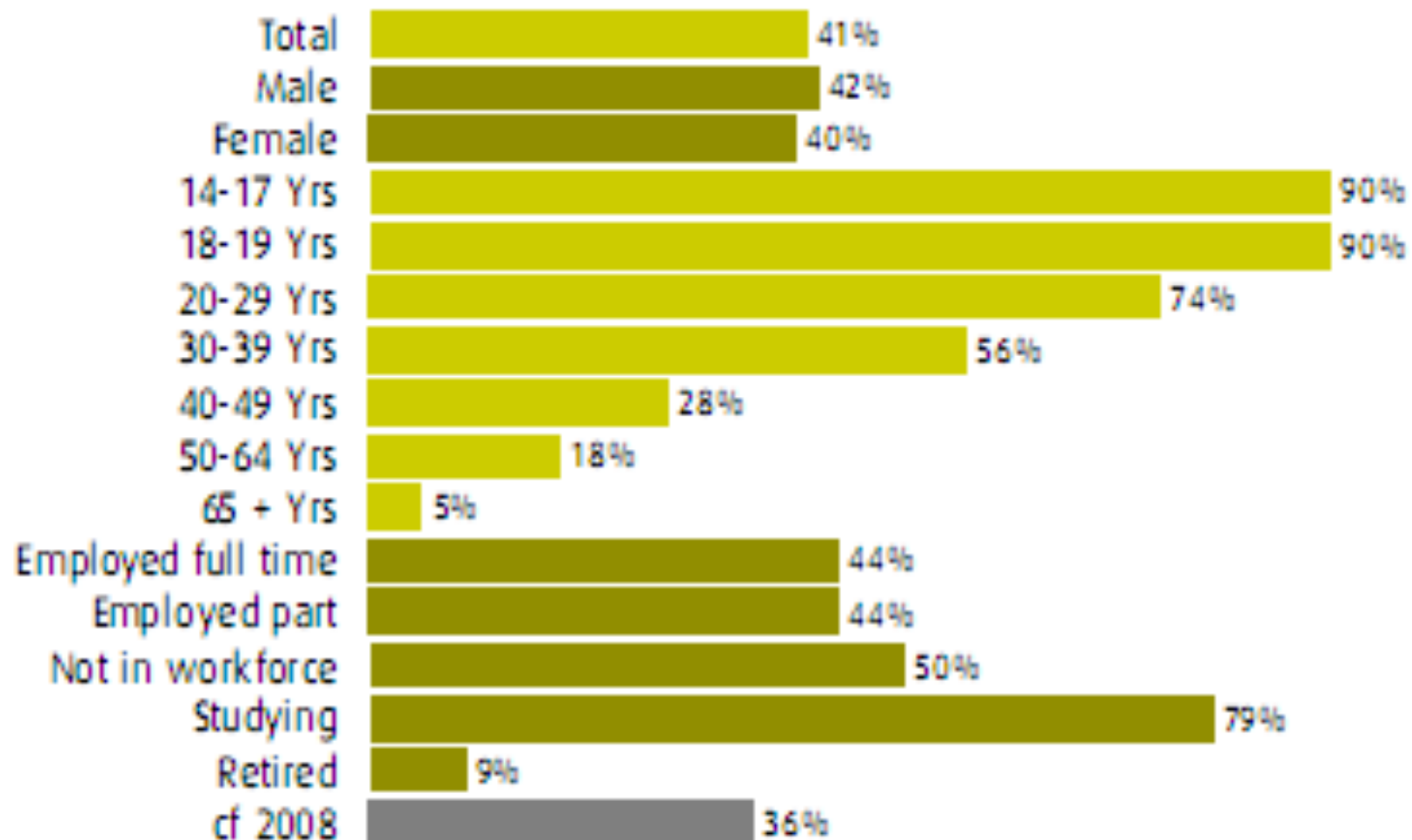- Facebook, MySpace, Twitter and LinkedIn are the most widely used social network sites in the western world.

Social Networking

It is BIG

- Over 70% of Australian internet users visited a social networking site in June 2009
- Facebook in Australia had 6 million annual visitors up 95% from 2008;
- Twitter went from 13,000 to 800,000 users in the same period
- Fox Interactive media (Sports?) had 4.3m visitors in June 2009

www.Comscore.com Sep 2009

UNIVERSITY OF
CANBERRA
AUSTRALIA'S CAPITAL UNIVERSITY

Use of social networking sites in last 12 months

Category	Percentage
Total	41%
Male	42%
Female	40%
14-17 Yrs	90%
18-19 Yrs	90%
20-29 Yrs	74%
30-39 Yrs	56%
40-49 Yrs	28%
50-64 Yrs	18%
65 + Yrs	5%
Employed full time	44%
Employed part	44%
Not in workforce	50%
Studying	79%
Retired	9%
cf 2008	36%

Base = All consumers

SOURCE: Sensis® e-Business Report
Sweeney Research - 2009

Emerging Online Markets = Younger Audiences, Fewer Women

- Not surprisingly, countries with higher internet penetration = more mature web audiences

- Australia, New Zealand, Singapore and HK have gender parity online; elsewhere there are fewer women

Internet Population % Women by Country

Country	%
China	42%
Japan	44%
India	30%
South Korea	47%
Australia	50%
Taiwan	47%
Malaysia	47%
Indonesia	36%
Philippines	48%
Hong Kong	50%
Singapore	51%
New Zealand	51%

Internet Population Age Distribution by Country

Country	15-24	25-34	35-44	45-54	55+
Japan	18%	22%	23%	17%	20%
South Korea	22%	25%	26%	18%	9%
Australia	21%	21%	21%	18%	19%
Hong Kong	20%	23%	25%	21%	10%
Singapore	20%	25%	27%	19%	9%
New Zealand	20%	21%	19%	17%	23%
Taiwan	24%	28%	22%	16%	10%
China	33%	30%	23%	9%	5%
India	38%	38%	15%	6%	2%
Malaysia	38%	26%	23%	9%	5%
Indonesia	40%	33%	17%	7%	3%
Philippines	40%	30%	20%	8%	2%

comSCORE.

©comScore, Inc. Proprietary and Confidential.   12

Audience 15+ accessing Internet from Home or Work
Source: comScore Media Metrix Demographic Report, May 2010

Facebook in Australia

- The second most popular website visited by Australians after Google.com.au
  - 7.83% of all visits in the month of September 2010
  - the most popular website for Australian's aged 18-24, with 8.97% of visits – October 2010
- Accounts for 56.8% of all visits to social networks in September 2010 - 3.8 times that of You Tube (15.1% share of visits).
- Facebook Mobile is the sixth most visited social, indicating the growing use of mobile devices across Wi-Fi networks.
- Female skew exists of those Australian's visiting 55.8% are from Women and 44.2% from Men.

Twitter % Reach

Legend (right side):
- Indonesia — 17.0
- Japan — 15.8
- Philippines — 14.9
- Singapore — 12.7
- India
- New Zealand — 9.6
- Malaysia
- Australia
- South Korea
- Hong Kong
- Vietnam
- Taiwan
- China

X-axis: Nov-2008, Dec-2008, Jan-2009, Feb-2009, Mar-2009, Apr-2009, May-2009, Jun-2009, Jul-2009, Aug-2009, Sep-2009, Oct-2009, Nov-2009, Dec-2009, Jan-2010, Feb-2010, Mar-2010, Apr-2010, May-2010

Audience 15+ accessing Internet from Home or Work
Source: comScore Media Metrix, November 2008 to May 2010

UNIVERSITY OF
CANBERRA
AUSTRALIA'S CAPITAL UNIVERSITY

27
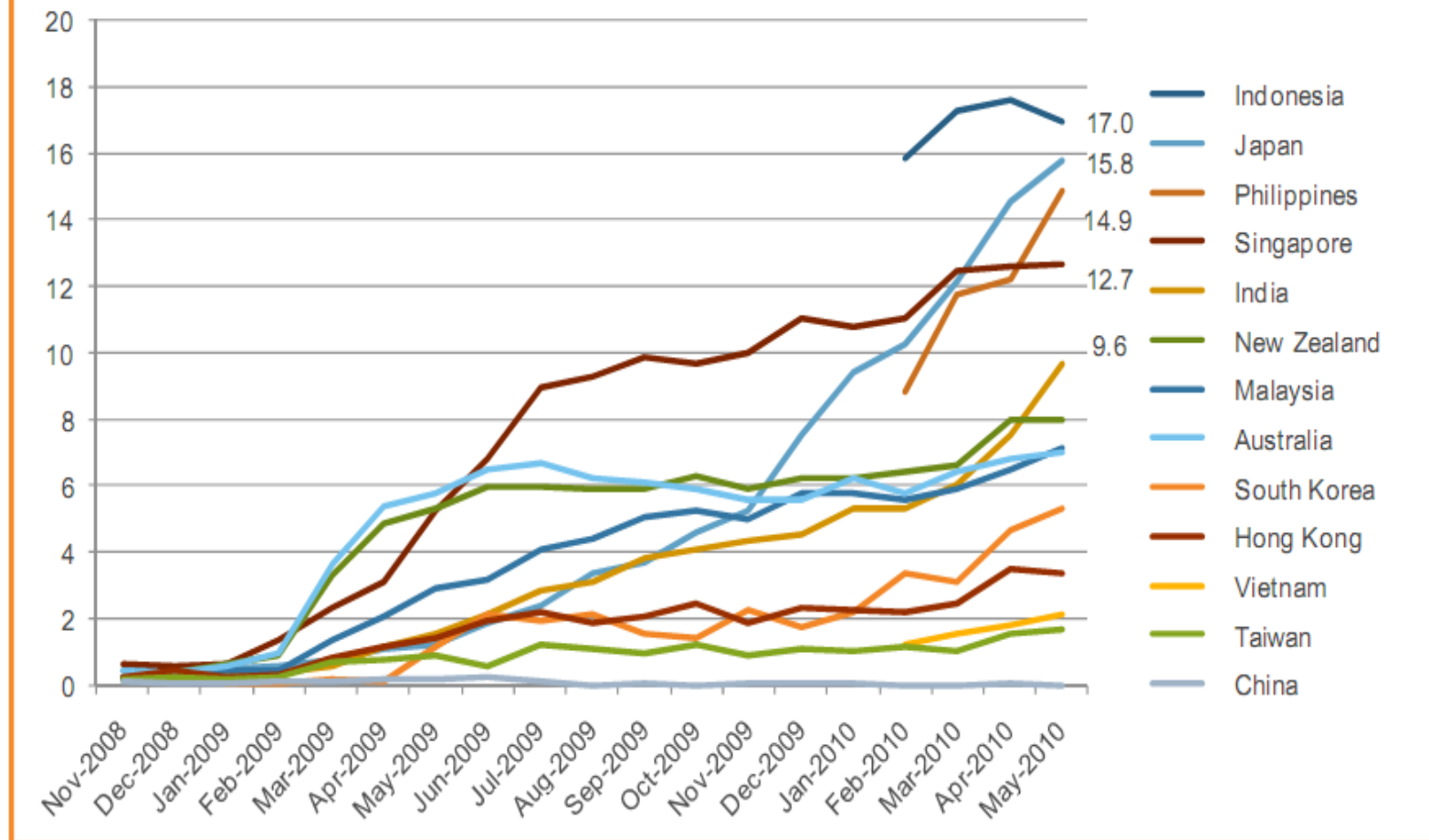
lancearmstrong on Twitter in Adelaide

- For those wondering about saturday wigley reserve ride, ride whatever kind of bike you want. Road, mtb, city, borrowed, old, new, whatever. 4:39 PM Jan 14th from UberTwitter

- Whoa!!! Adelaide came out!! Thx to every1 for being there. Estimates were anywhere between 5 and 10 thousand folks. On bikes!! 10:50 AM Jan 16th from UberTwitter

Social Technographic Profile

For marketing in the cyberworld knowing the audience's demographic profile is no longer enough.
We need a new set of criteria.

- Social Technographic Profile is a term coined by Charlene Li and Josh Bernoff in their book <u>Groundswell</u> based on a concept of Technographic Segmentation introduced by Dr. Edward Forrest in 1985.

- A person's social technographic profile defines his or her personality and characteristics when it comes to social media.

Social Technographic Profile

- What does the person do online?
- What are his/her web habits?
- What kinds of sites does s/he visit?
- How does s/he relate to those sites - actively or passively?

Thus as a marketer which types of social media will be most effective in reaching your audience?

Social Technographic Profile

- **Creators** are people who generate content.
  - This can range from writing blog posts and wiki entries to creating and uploading videos on YouTube. Creators are the true value adders of the web. They make the stuff everyone else comments on.
- **Critics** are users who rank and review products, web posts, pictures, videos or anything else.
  - They play a key role in influencing what products people buy, what videos people watch, and what competitive events they will enter.
- **Joiners** are those who join and maintain profiles on social network sites like Facebook, MySpace and Twitter.
  - They like to connect with others who share their interests.

Social Technographic Profile

- **Spectators** are users who do not actively participate but watch and read from the wings.
  - They silently read others' posts, view others' content without making their presence known. They are by far the most numerous participants on any social networking site.

- **Inactives** are those who are still living in feudal times and have no web activity.
  - They don't really need to be considered in a social media campaign (though, possibly, they can still be reached by snail mail).

What people are doing

Who participates (U.S. online users)

	Young Teens 12 to 17	Youth 18 to 21	Generation Y 22 to 26	Generation X 27 to 40	Young Boomers 41 to 50	Older Boomers 51 to 61	Seniors 62+
Creators publish Web pages, write blogs, upload videos to sites like YouTube.	34%	37%	30%	19%	12%	7%	5%
Critics comment on blogs and post ratings and reviews.	24%	37%	34%	25%	18%	15%	11%
Collectors use Really Simple Syndication (RSS) and tag Web pages to gather information.	11%	16%	18%	16%	15%	16%	11%
Joiners use social networking sites.	51%	70%	57%	29%	15%	8%	6%
Spectators read blogs, watch peer-generated videos, and listen to podcasts.	49%	59%	54%	41%	31%	26%	19%
Inactives are online but don't yet participate in any form of social media.	34%	17%	21%	42%	54%	61%	70%
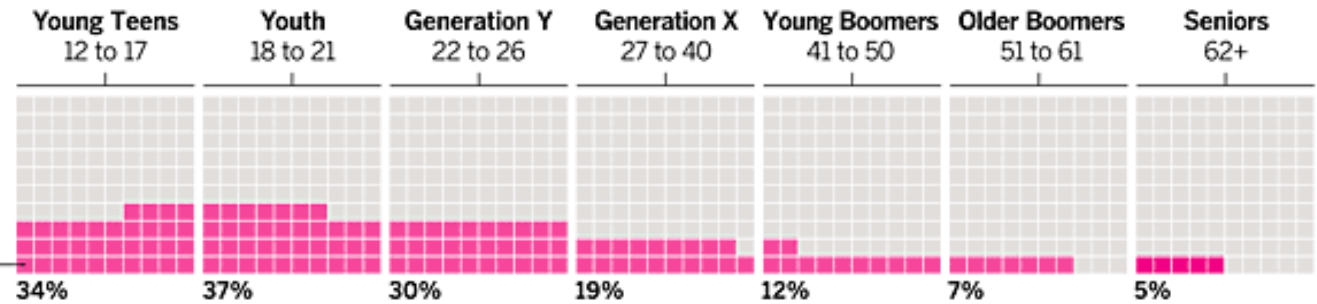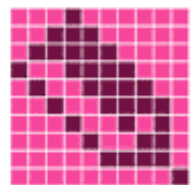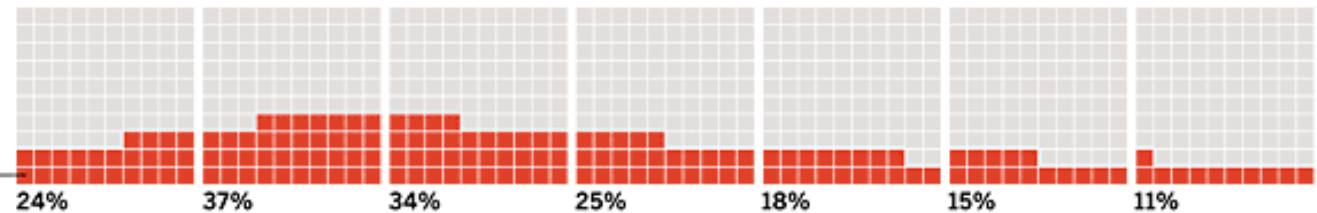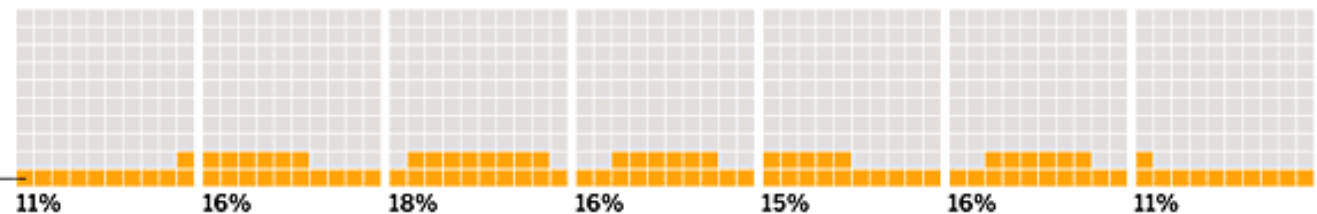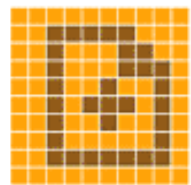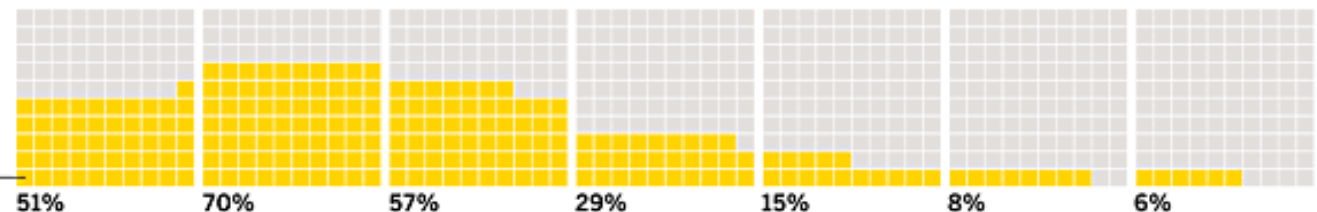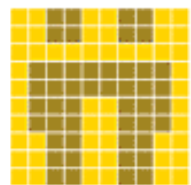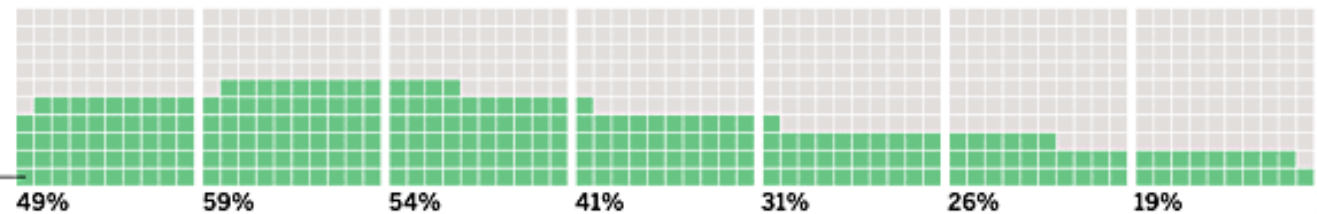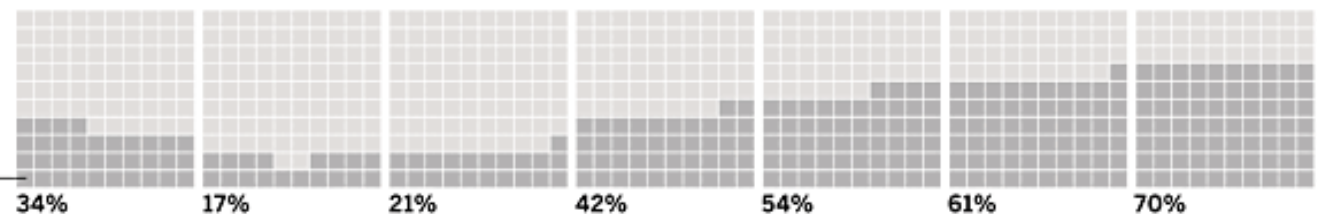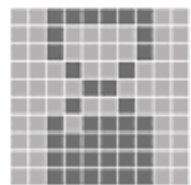
Data: Forrester Research

CHART BY ARNO GHELFI

Connection Generation

How connection determines our place in society and business

- An Australian book by Iggy Pintado (2009), published by him, and available through Amazon.com

For more information on Iggy,

visit www.iggypintado.com.

You can also connect to Iggy:

Connect on Linkedin

Follow on Twitter

Friend on Facebook

Connection Profiles

- Based on a survey of 130 individuals (Pintado, 2009)

- Equal mix of
    - Pre Boomers   born pre 1945
    - Baby Boomers   1945-1960
    - Generation X   1961-1981
    - Generation Y   1981- 2002

- Five Connection Profiles

Connection Profiles

based on degree of online connectedness

- Basic
  - Small number of connections
  - Laggard in use of connection technologies
  - Delegates connection needs
- Passive
  - Moderate number of connections
  - Late majority of technology adopters
  - "a passenger" as a connector
- Selective
  - Manageable number of connections
  - Early majority of technology adopters
  - "engaged" as a connector
- Active
  - Large number of connections
  - Early adopter of technology
  - Drives their connection activity
- Super connector
  - Hyper connected
  - Innovator in use of technology
  - Disciplined management of connectedness

The online world moves fast!

Year-over-Year Change in Time Spent Online
Source: comScore Media Metrix, Dec-2010 vs .Dec-2009

Ages 15-34 — Email: -11%, Instant Messengers: -38%, Portals: -28%, Social Networking: 32%

Ages 35+ — Email: 6%, Instant Messengers: -42%, Portals: -18%, Social Networking: 38%

Legend: ■ Email ■ Instant Messengers ■ Portals ■ Social Networking

comSCORE
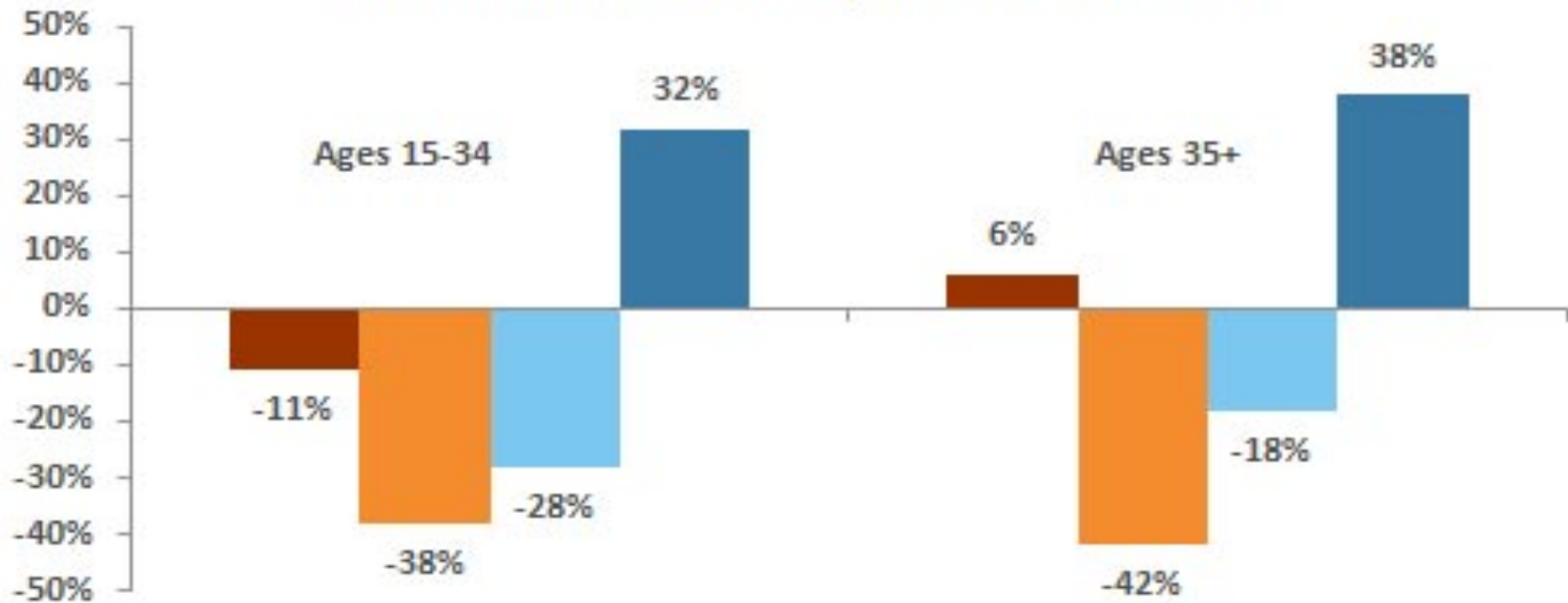
Cycle Tourism Research Project

Figure 4- Information Flows for the Cycle Tourist
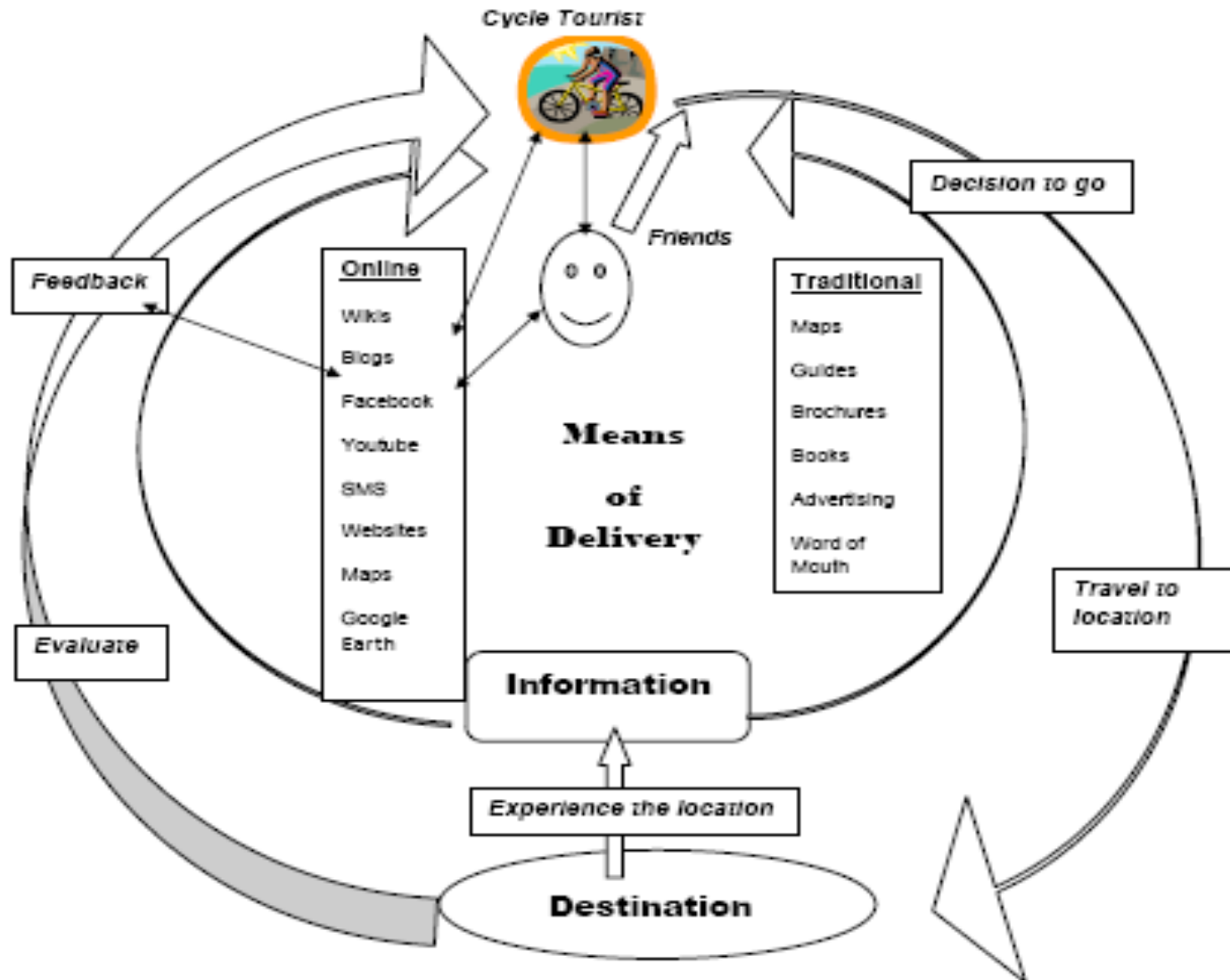
Research Question 1

What is the role and influence of online technology (the internet, online maps and social networking) and associated information sources in destination choice for cycle tourists?

Research Question 2

What information do cyclists seek through the use of online technology to assist in making destination choices for cycling related travel and how do they want it to be presented and accessed?

Research Question 3

- *Do the different demographics of four major cycling sectors (recreational, MTB, BMX, road racing) give rise to different motivations for travel and thus different use of technology in destination choice?*

The Survey

- Online survey using Survey Monkey
- 42 questions covering demographics, cycling preferences, and online profiles
- Distributed through major cycling groups
- Commenced late Oct 09
- Over 650 responses
- Final analysis and reports (Ph D thesis) proposed by July 2011
- **Significant trends now identifiable**

Age distribution of cyclists
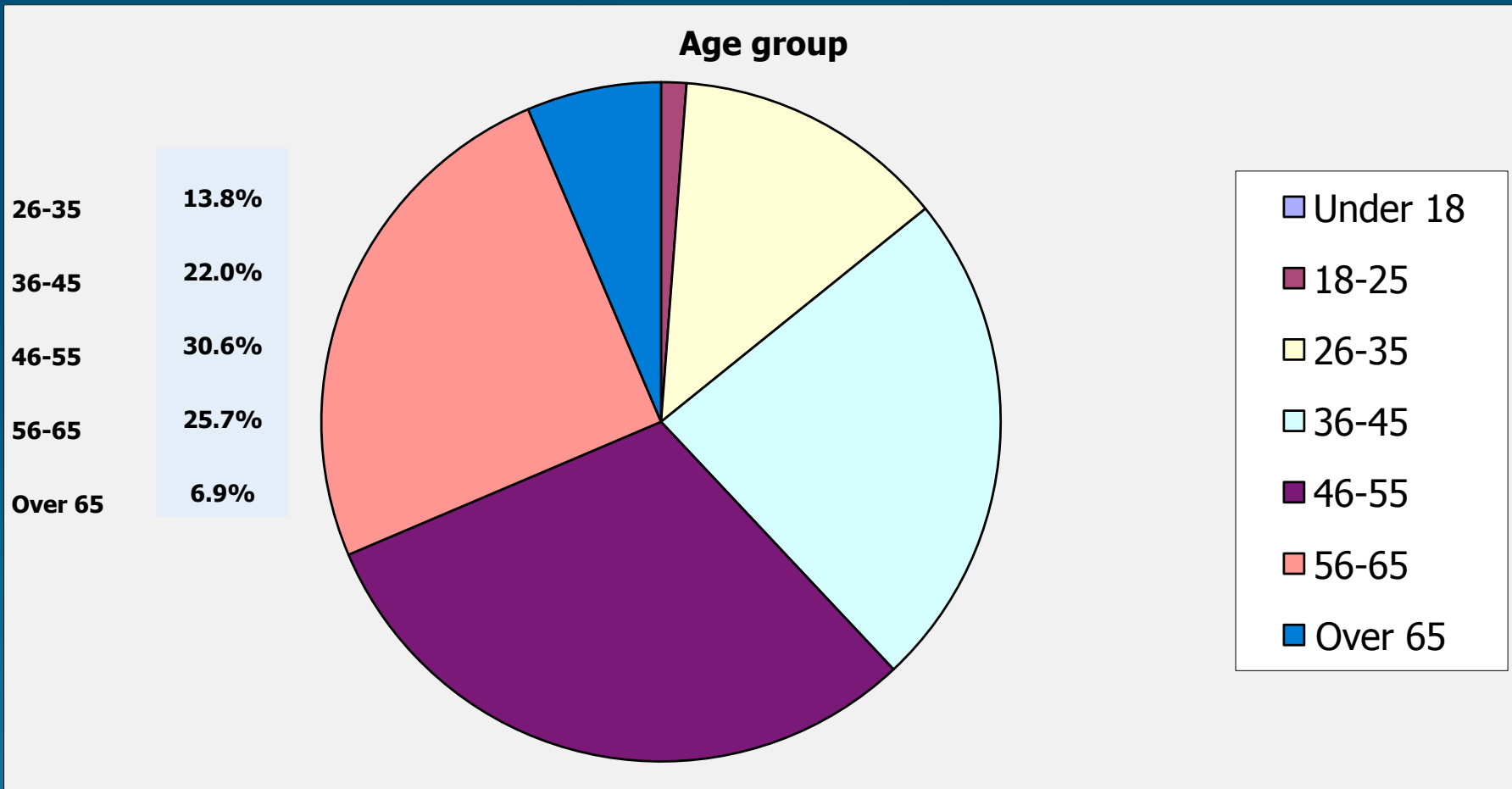
Gender
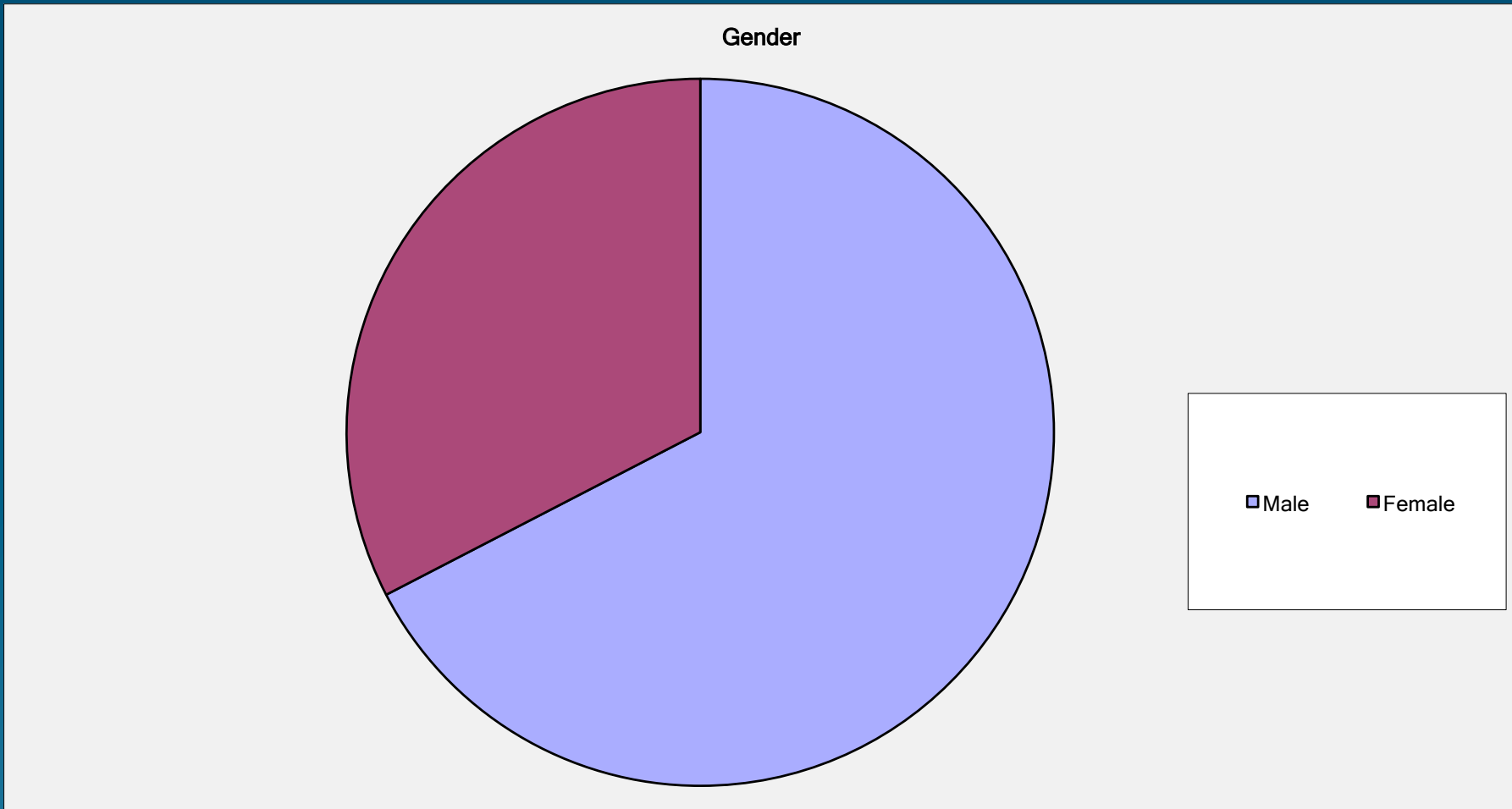
If you are in paid employment, what is your current salary or income level (pre tax)?

If you are in paid employment, what is your current salary or income level (pre tax)?
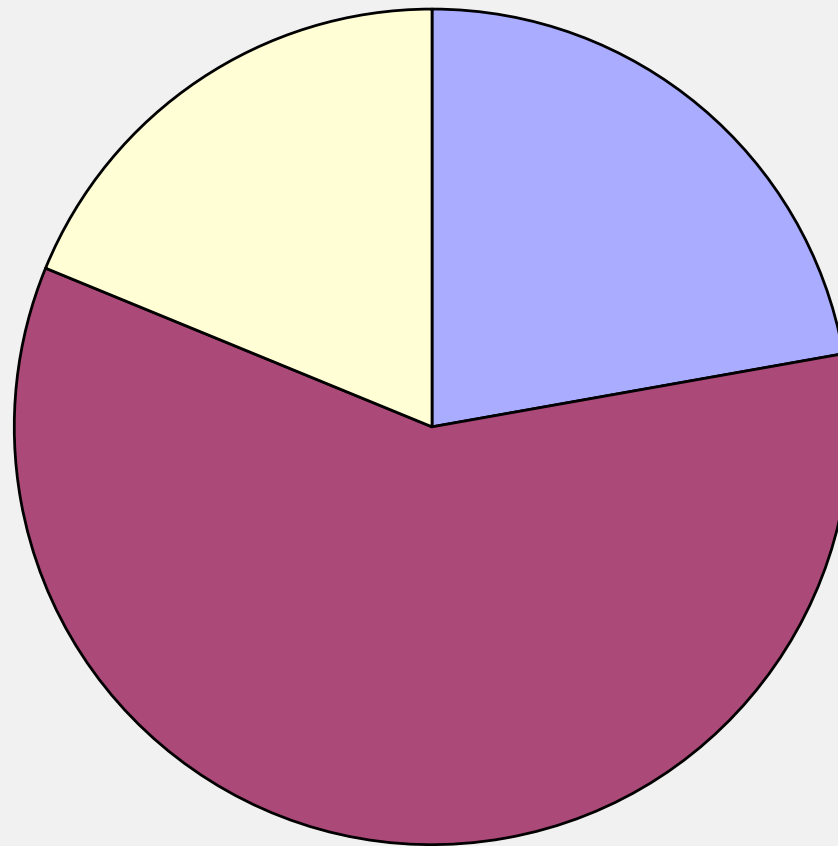
- less than $25,000
- $25,000 - $50,000
- $50,001 - $75 000
- $75,001- $100,000
- More than $100,000
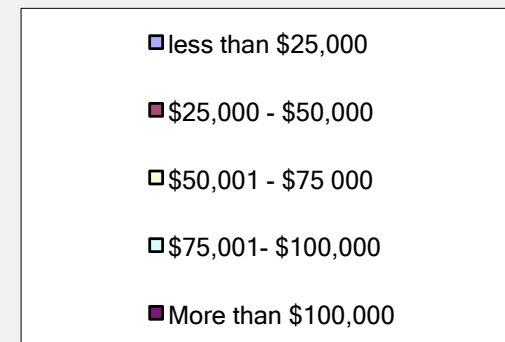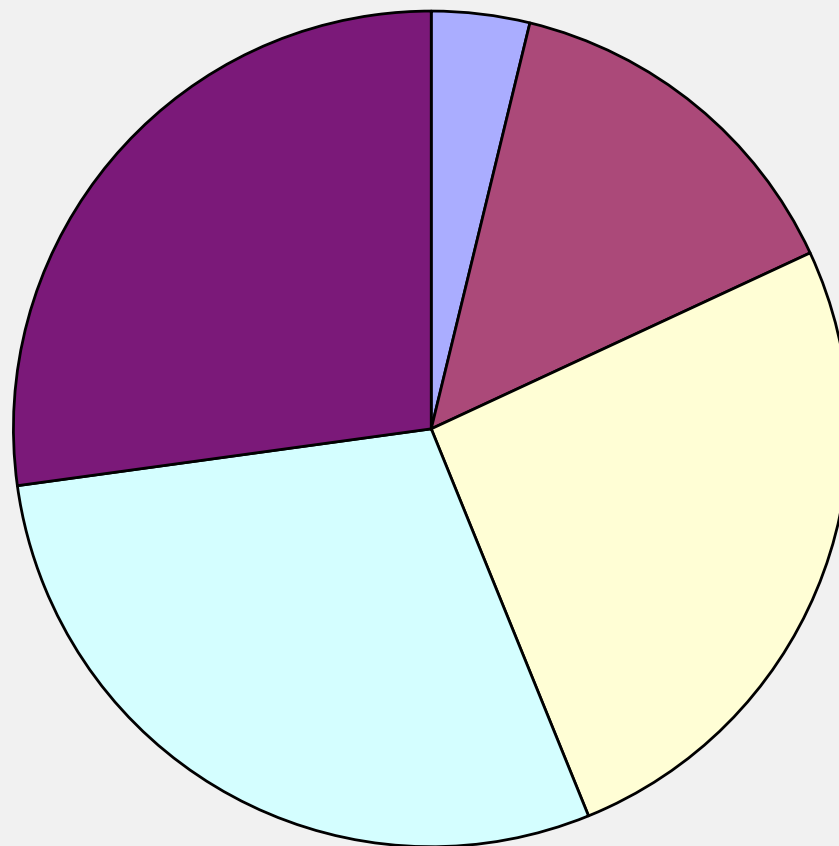
What is your highest academic qualification?
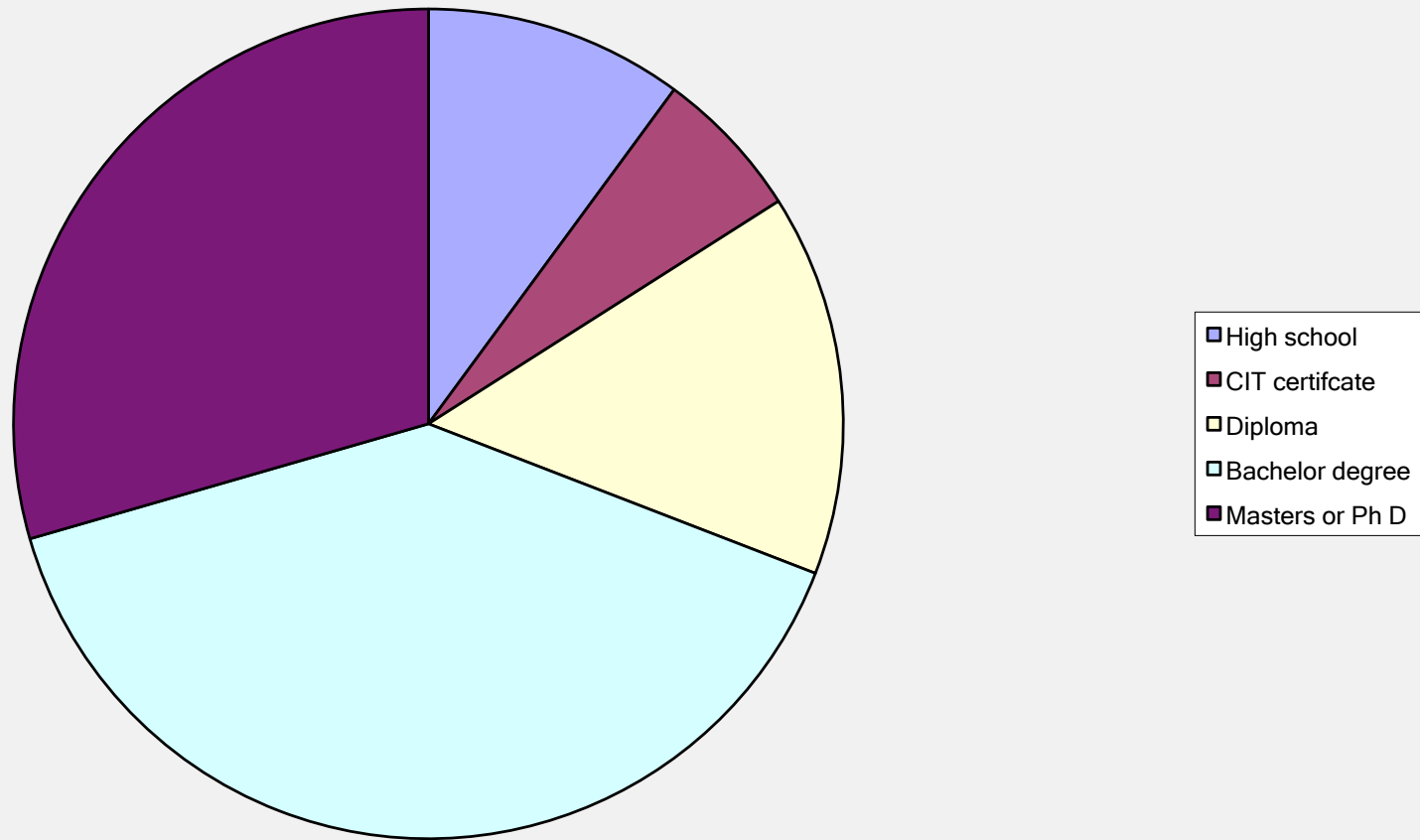
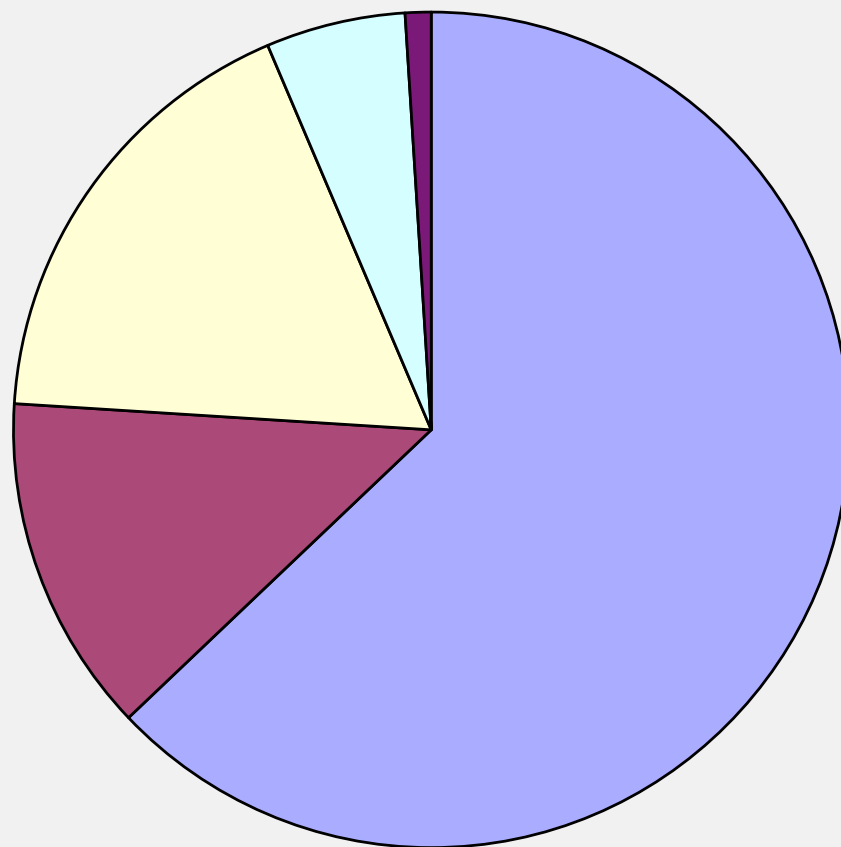# What is you family situation?

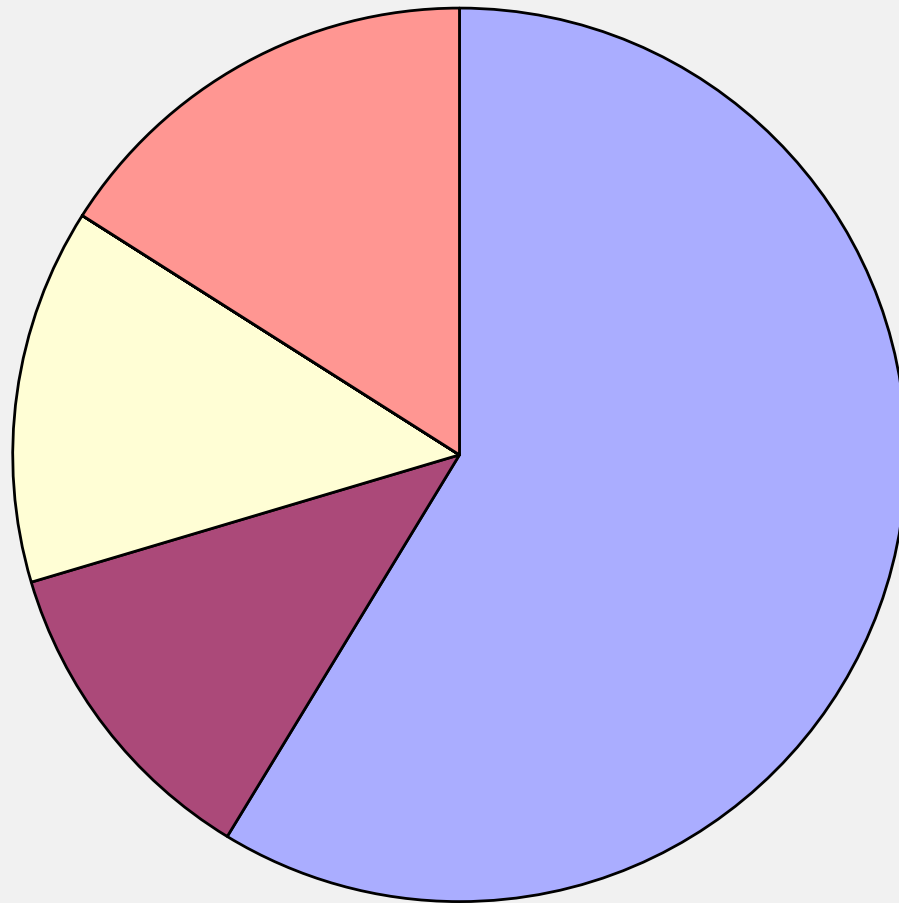

What is you family situation?

Single   Married   Long term relationship

How many children live with you?

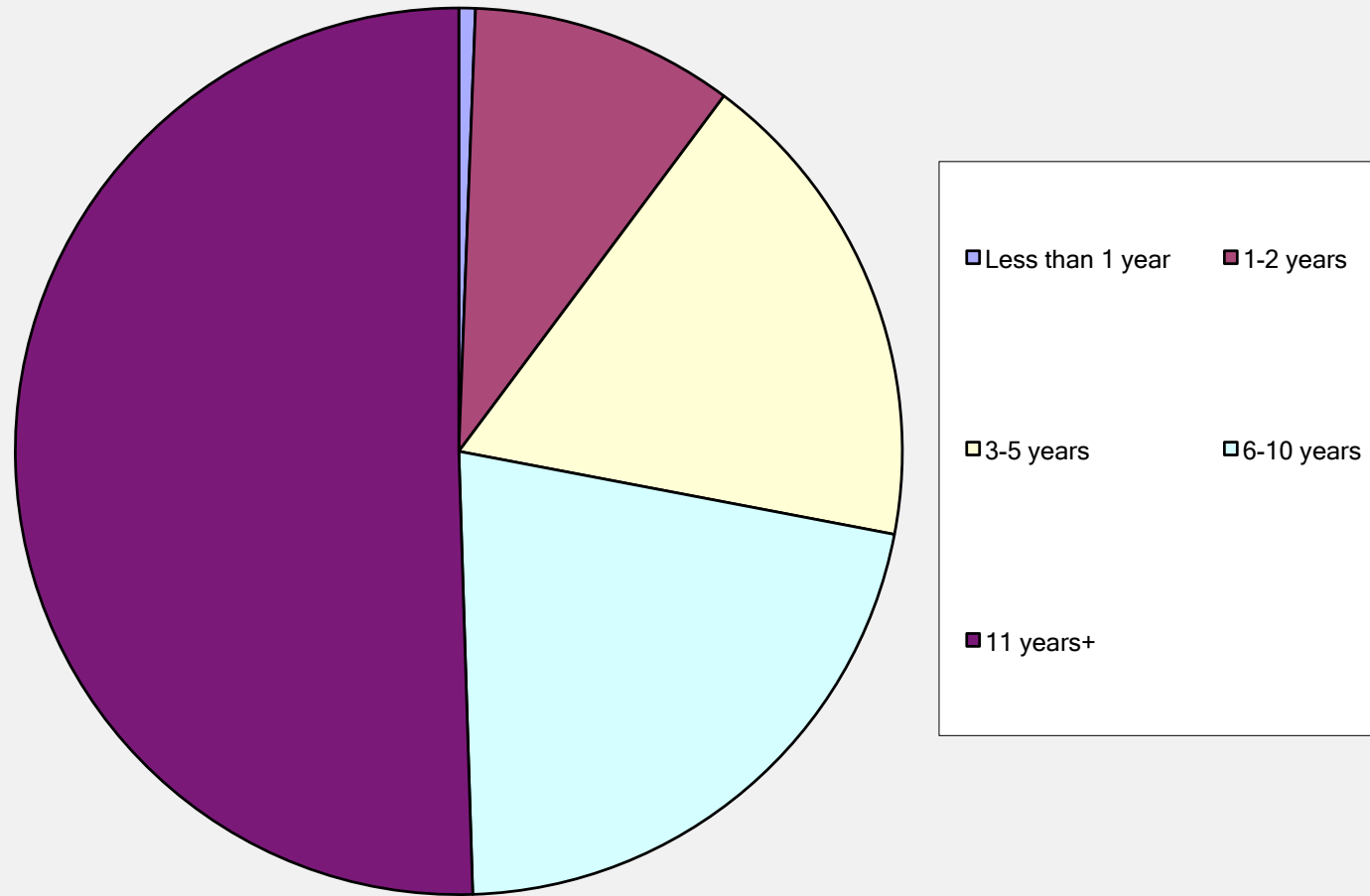How many children live with you?
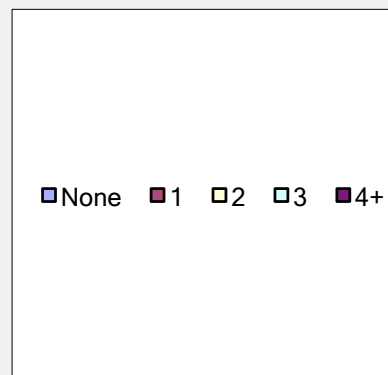
None ■1 □2 □3 ■4+

What is your primary area of interest or activity in cycling?
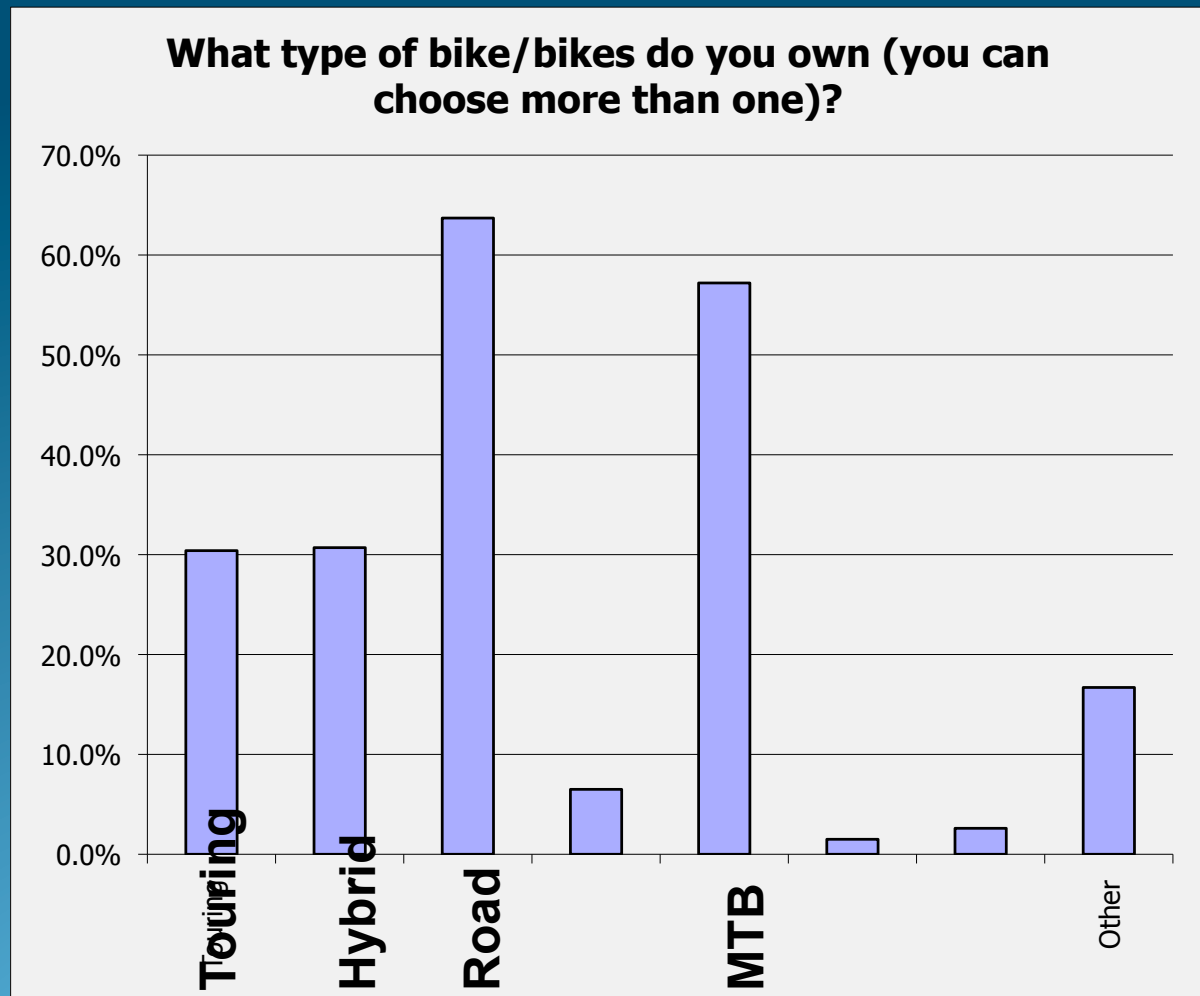

Legend:
- Recreational
- Mountain Biking
- Road or Track Racing
- BMX racing
- BMX freestyle
- Other

For how many years have you been involved in your cycling area of primary interest?

# What type of bike/bikes do you own

- Touring 30.4%
- Hybrid 30.7%
- Road 63.7%
- Track 6.5%
- MTB 57.2%
- BMX 1.5%
- Recumbent 2.6%
- Other 16.7%

What type of bike/bikes do you own (you can choose more than one)?

UNIVERSITY OF
CANBERRA
AUSTRALIA'S CAPITAL UNIVERSITY

Apart from your primary area of interest do you particpate in other cycling disciplines at times?

Apart from your primary area of interest do you particpate in other cycling disciplines at times?
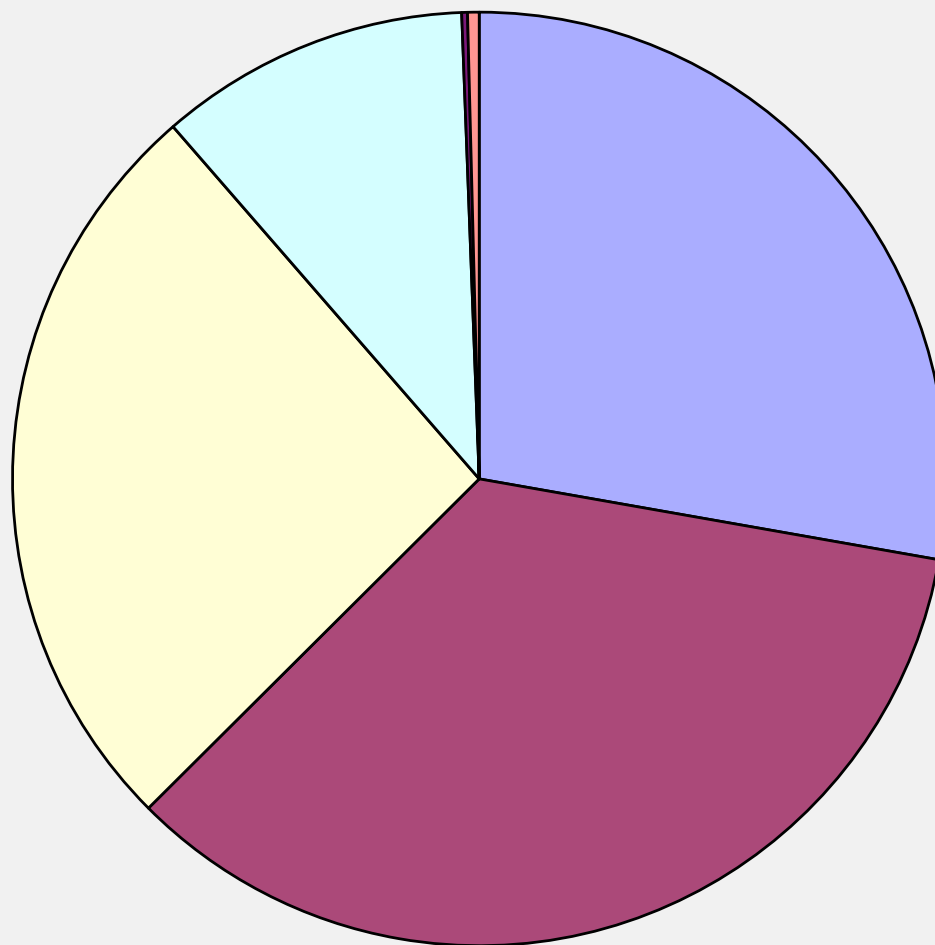
- ■ No
- ■ Recreational
- □ Mountain Biking
- □ Road and Track racing
- ■ BMX racing
- □ BMX freestyle

UNIVERSITY OF
CANBERRA
AUSTRALIA'S CAPITAL UNIVERSITY

What is your motivation for cycling when you travel outside your local area?
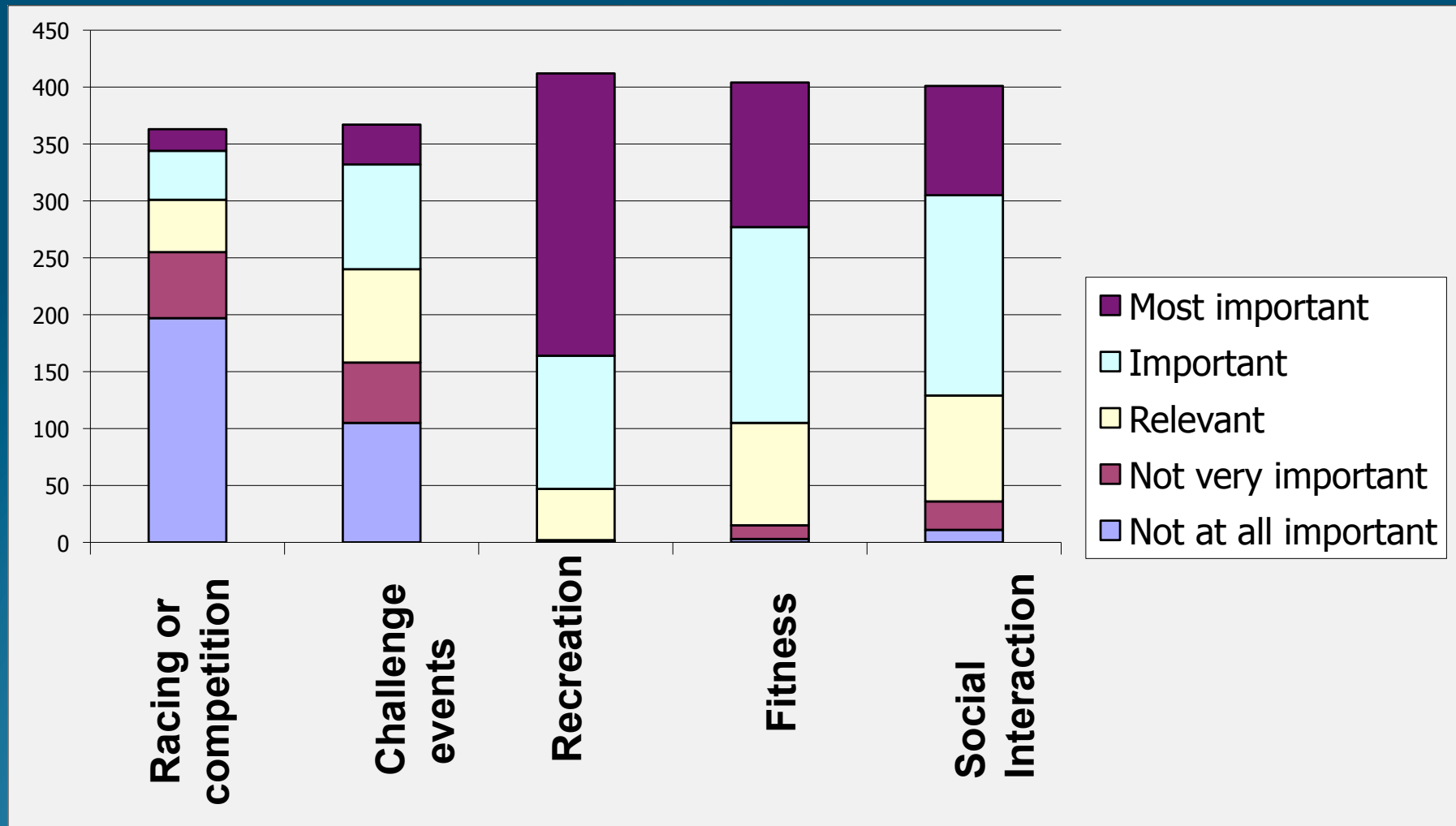
Do you use online technologies such as the internet, websites or social networking to help with your choice of destination for cycling related travel?

96.4%

Yes
No

UNIVERSITY OF
CANBERRA
AUSTRALIA'S CAPITAL UNIVERSITY
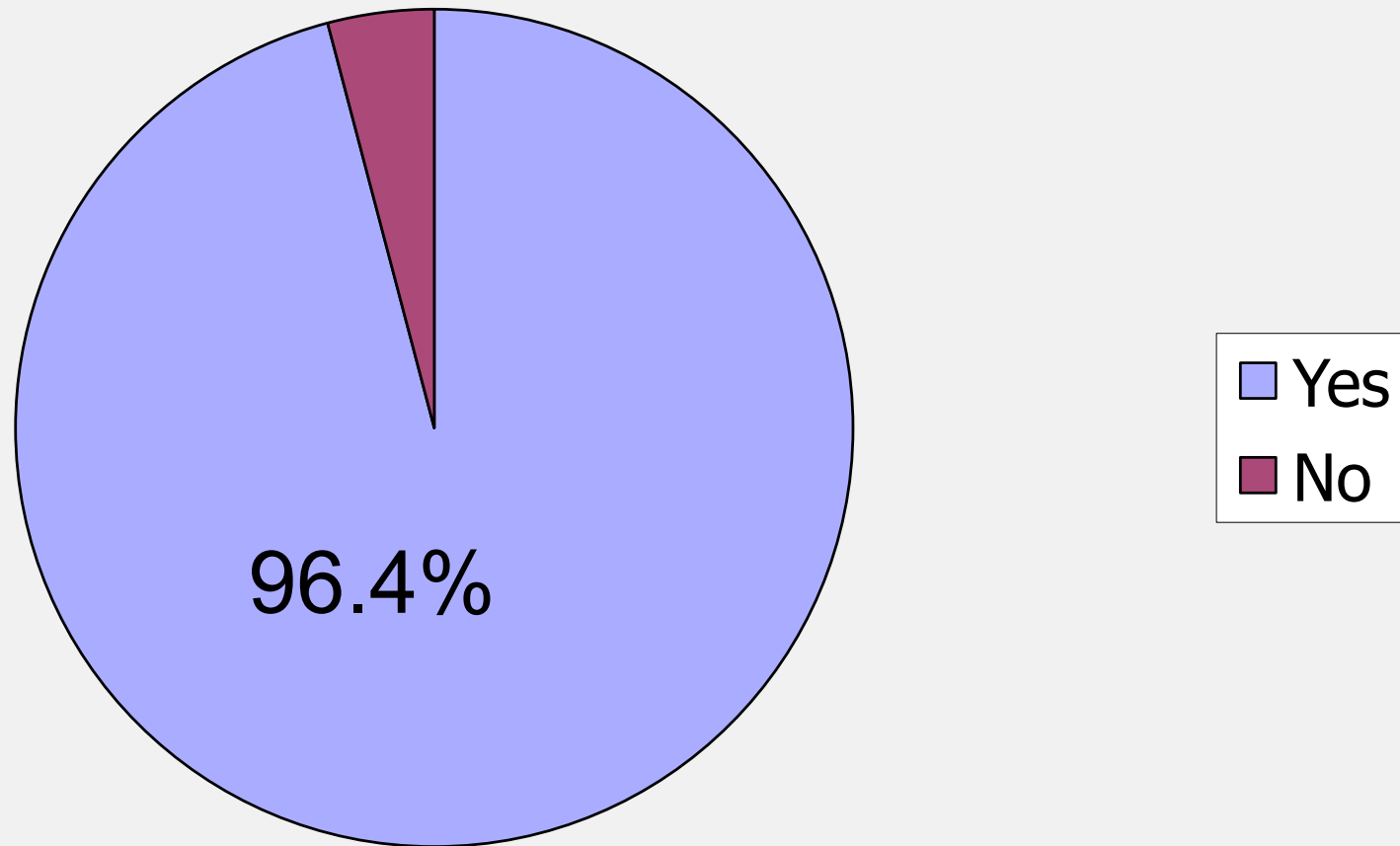
Are you a member of any cycling clubs or associations?

Are you a member of any cycling clubs or associations?
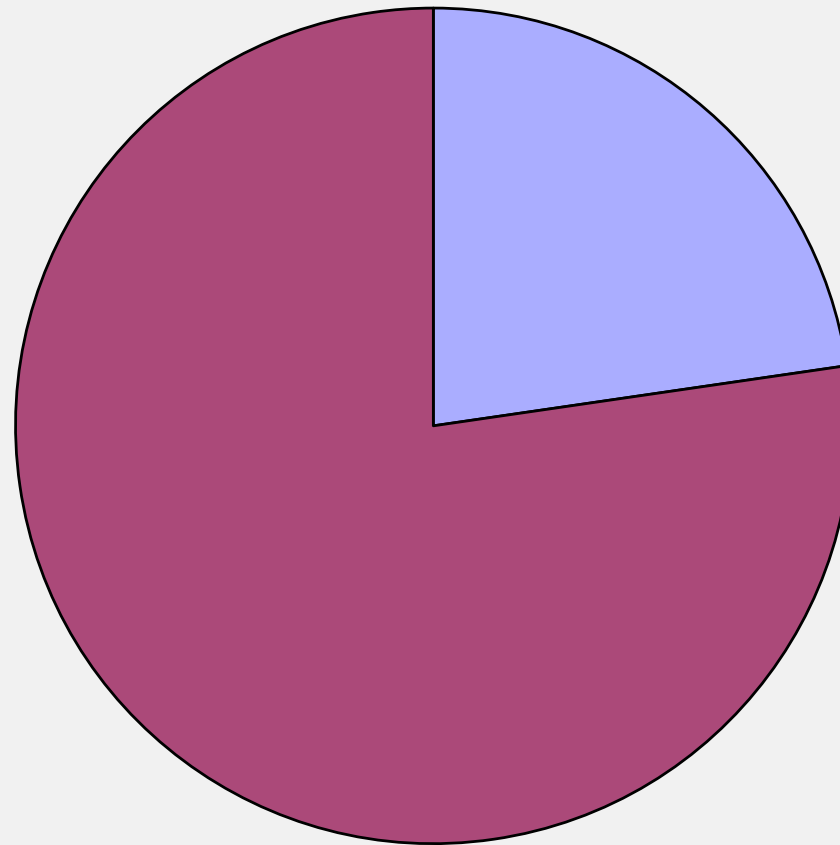
No   Yes

When you travel outside you home region do you take your own bike with you?

When you travel outside you home region do you take your own bike with you?
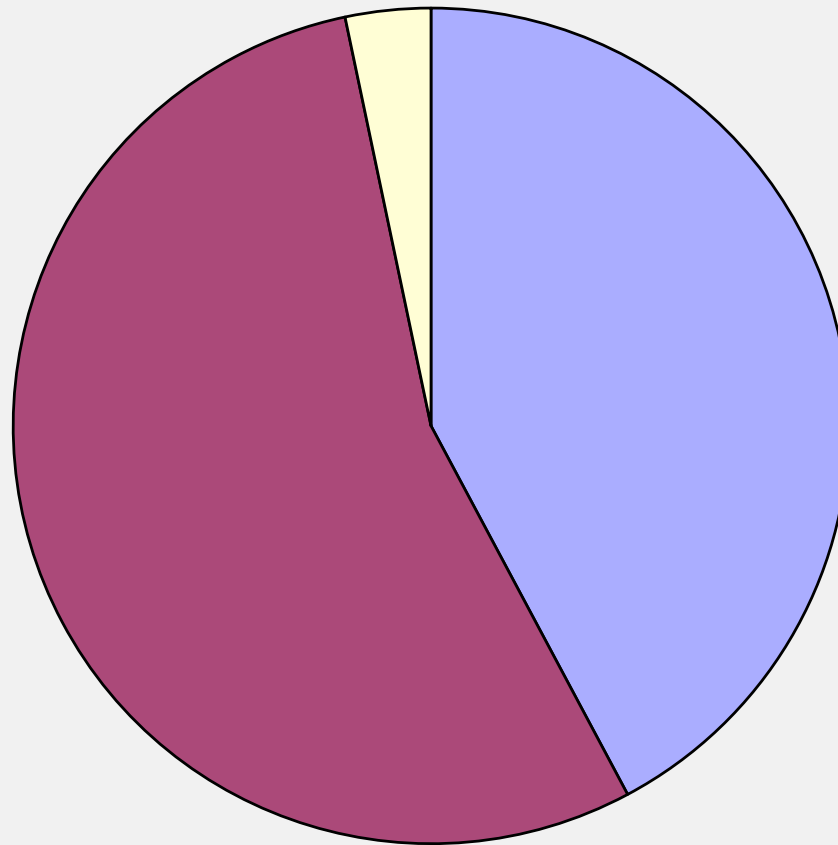
Legend: ■ Always ■ Sometimes □ Never

How often each year would you travel with cycling as a major part of your reason for travel?

How often each year would you travel with cycling as a major part of your reason for travel?

- Never
- 1-5 times per year
- 6-10 times per year
- More than ten times per year

UNIVERSITY OF CANBERRA
AUSTRALIA'S CAPITAL UNIVERSITY
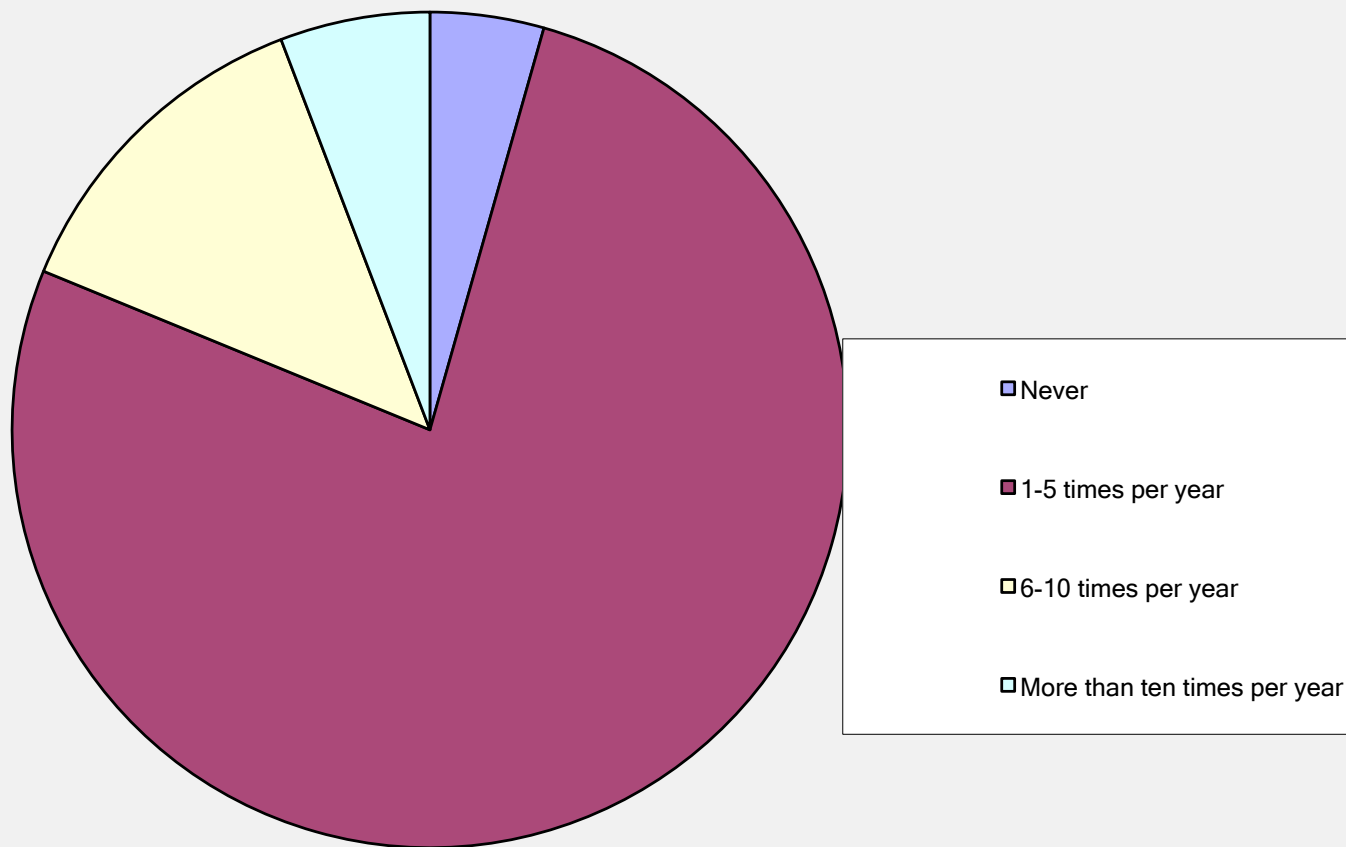
What is your normal means of accessing the internet or online sources when looking at cycling travel options?

- Desktop at home   66.8%
- Desktop at office/workplace   38.7%
- Laptop   43.4%
- Netbook   5.2%
- Mobile device (e.g smart phone)   8.8%
- Internet cafes or libraries   6.2%

Do you subscribe to or use any of the following online social networking tools?

Do not use social networking tools	49.7%
Facebook	41.9%
My Space	2.8%
Twitter	10.1%
Linked In	13.4%
Other	5.6%

What is your primary area of interest or activity in cycling? *
Social Networking - SPSS Cross tabulation

What is your primary area of interest or activity in cycling?	Do you use social networking tools?		Total
	Yes	**No**	**Total**
Recreational	183	192	375
	48.8%	51.2%	100%
MTB	28	47	75
	37.3%	62.7%	100%
Road or Track Racing	27	60	87
	31%	69%	100%
Other	39	62	101
	38.6%	61.4%	100%
Total Respondents	**277**	**361**	**638**
	43.4%	**56.6%**	**100%**

What is your primary area of interest or activity in cycling? *
Facebook - SPSS Cross tabulation

What is your primary area of interest or activity in cycling?	Do you use Facebook ?		
	Yes	No	Total
Recreational	135	240	375
	36%	64%	100%
MTB	37	38	75
	49.3%	50.7%	100%
Road or Track Racing	33	54	87
	37.9%	62.1%	100%
Other	40	61	101
	39.6%	60.4%	100%
Total Respondents	245	393	638
	38.4%	61.6%	100%

What is your primary area of interest or activity in cycling? * Social Networking **Twitter** - SPSS Cross tabulation

What is your primary area of interest or activity in cycling?	Do you use **Twitter ?** Yes	No	Total
Recreational	21	354	375
	5.6%	94.4%	100%
MTB	5	70	75
	6.7%	93.3%	100%
Road or Track Racing	14	73	87
	16.1%	83.9%	100%
Other	13	88	101
	12.9%	87.1%	100%
Total Respondents	53	585	638
	8.3%	91.7%	100%

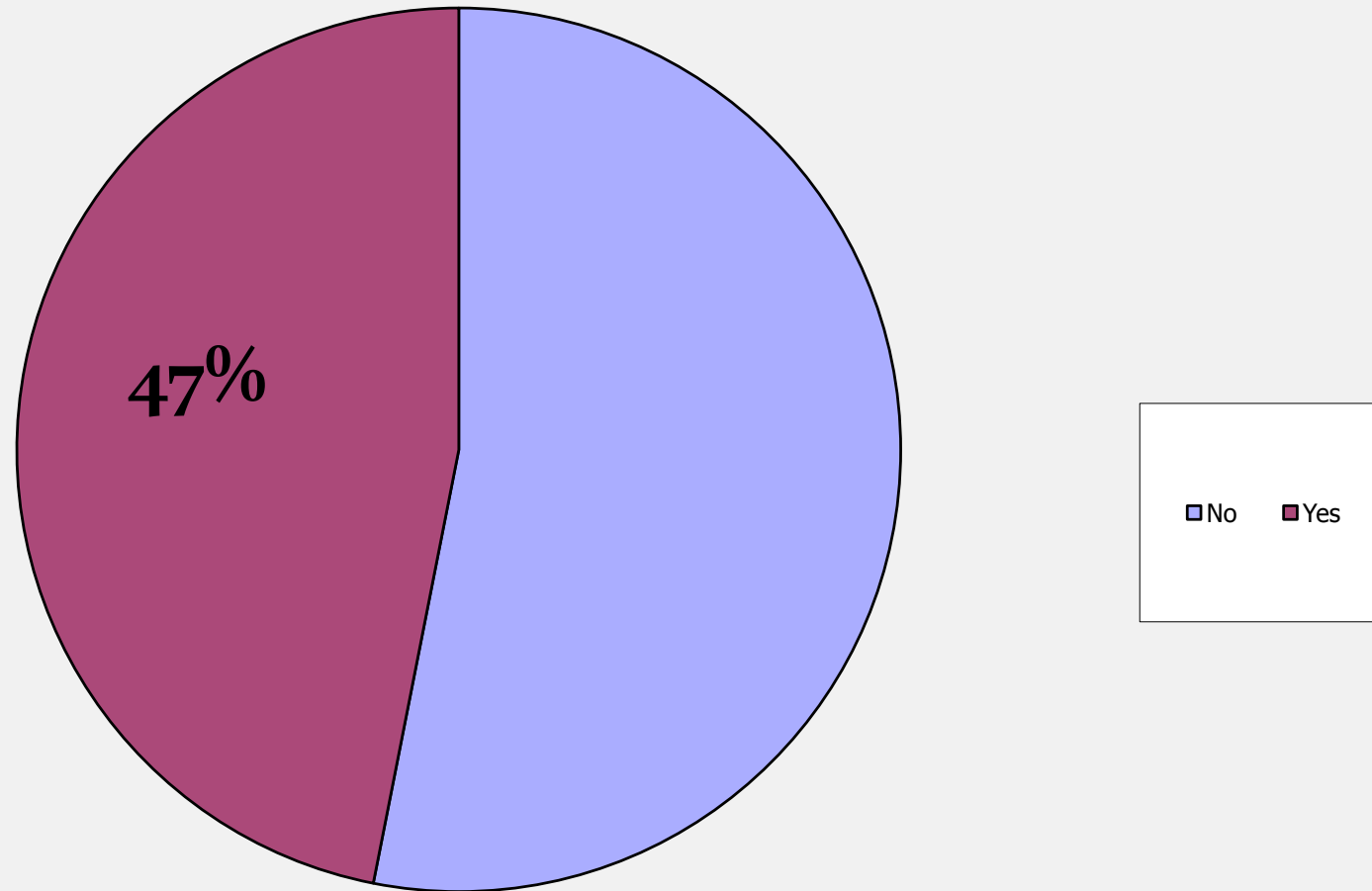# What is your primary area of interest or activity in cycling? * Social Networking LinkedIn - SPSS Cross tabulation

What is your primary area of interest or activity in cycling?	Do you use LinkedIn? Yes	No	Total
Recreational	38	337	375
	10.1%	89.9%	100%
MTB	2	73	75
	2.7%	97.3%	100%
Road or Track Racing	12	75	87
	13.8%	86.2%	100%
Other	18	83	101
	17.8%	82.2%	100%
Total Respondents	70	568	638
	11%	89%	100%

If you use online social networking do you talk about cycling there?

32%

No   Yes

UNIVERSITY OF
CANBERRA
AUSTRALIA'S CAPITAL UNIVERSITY
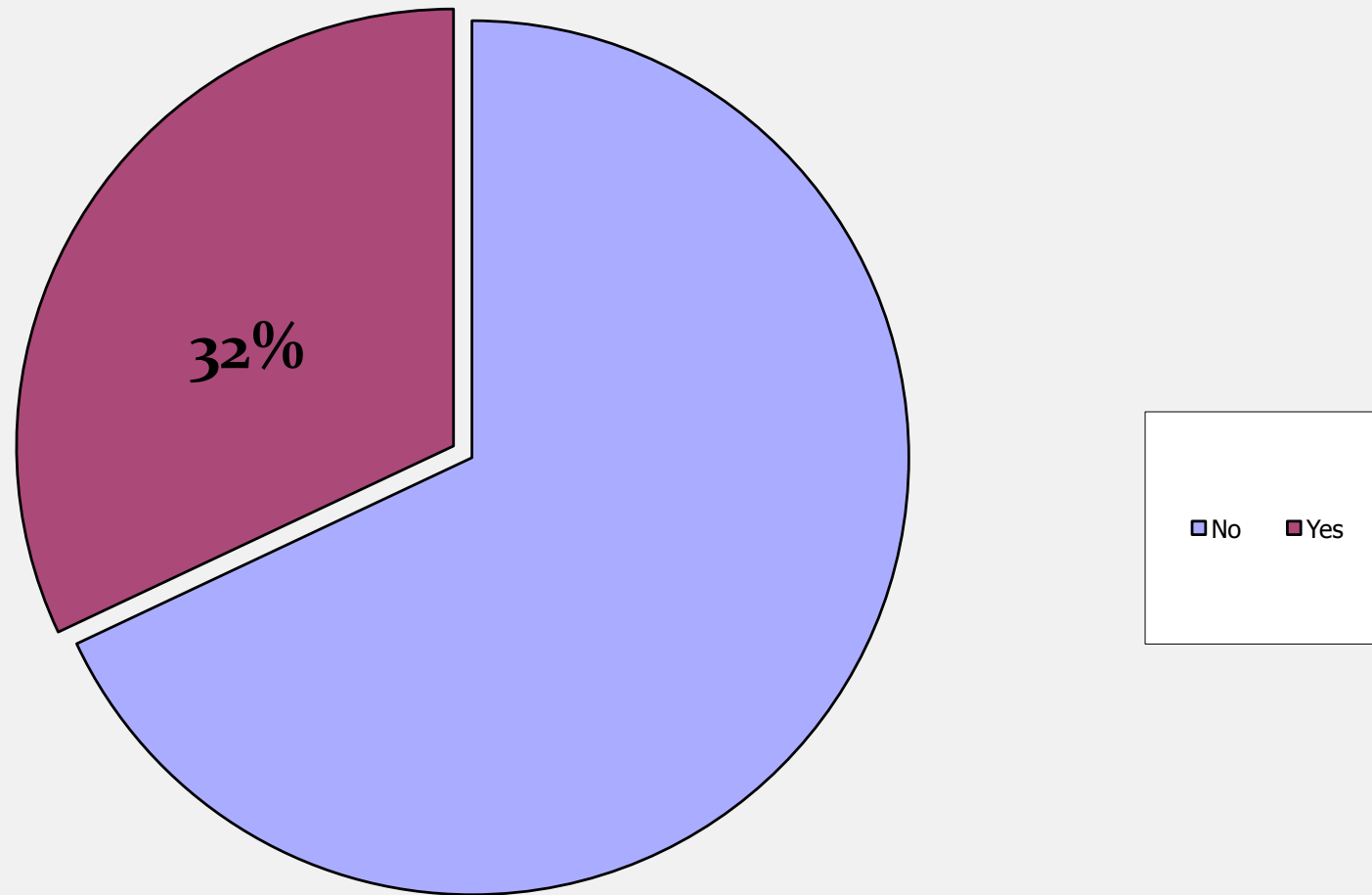
Do you own a GPS enabled device (Smart Phone, Navigation device)?

47%

No Yes

UNIVERSITY OF
CANBERRA
AUSTRALIA'S CAPITAL UNIVERSITY

Have you used online mapping tools (e.g Google earth) to help you decide on your cycling destinations?

75%

Legend: No, Yes

UNIVERSITY OF
CANBERRA
AUSTRALIA'S CAPITAL UNIVERSITY
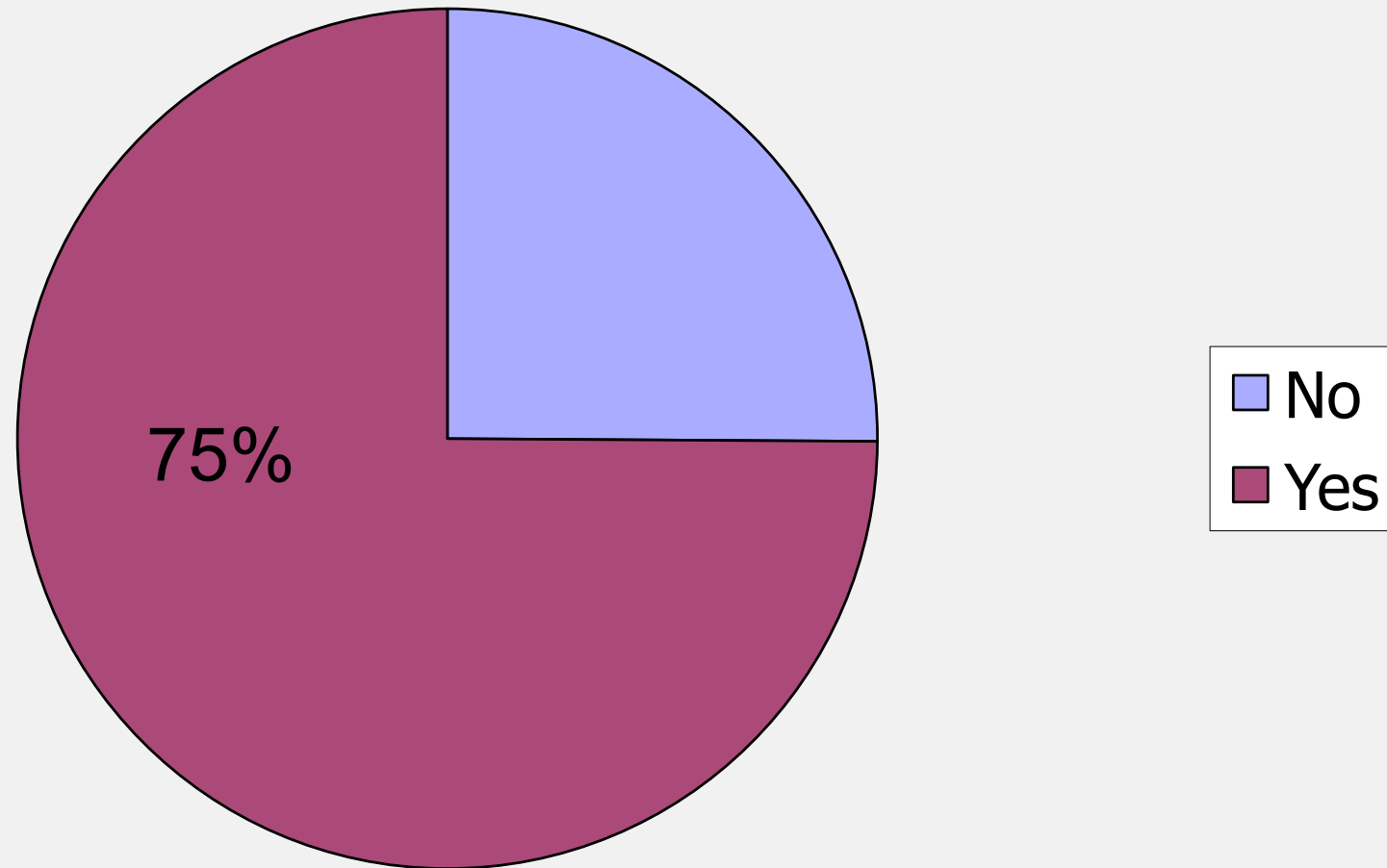
Ph D thesis(Lamont 2009) specifically addresses the needs of cyclists for wayfinding aids and signage.
Key content of maps for touring cyclists.

In descending order of importance.

- Dangerous roads not suited to cycling
- Location of segregated cycling routes (no motor traffic)
- Distances between intermediate towns
- Location of accommodation
- Location of camping grounds
- Indication of cycling route surface and condition
- Indication of shoulder width and condition along roads
- Location of drinking water
- Hill gradient information
- Location of sites of interest
- Location of toilets
- Location of bicycle repair /maintenance shops

If you use online maps for investigating your potential cycling destination what are the main features that you are seeking or value the most?

Rating Ave

(lowest no most important)

- On road details (paved/unpaved?)   2.03
- Cycle paths (no motorised traffic)   2.33
- Off road details (firetrail/single track)   2.96
- Event routes   3.04
- Facility locations (e.g velodrome/BMX park)   4.21
- Route profiles (elevations along route)   2.18
- Proximity to services   2.59
- Toilet stops   3.10
- Coffee shops   3.17
- Bike shops   3.12
- Accessibility of accommodation   2.6
- Weather forecasts   2.4

If you have used online mapping tools, which would you recommend to others?
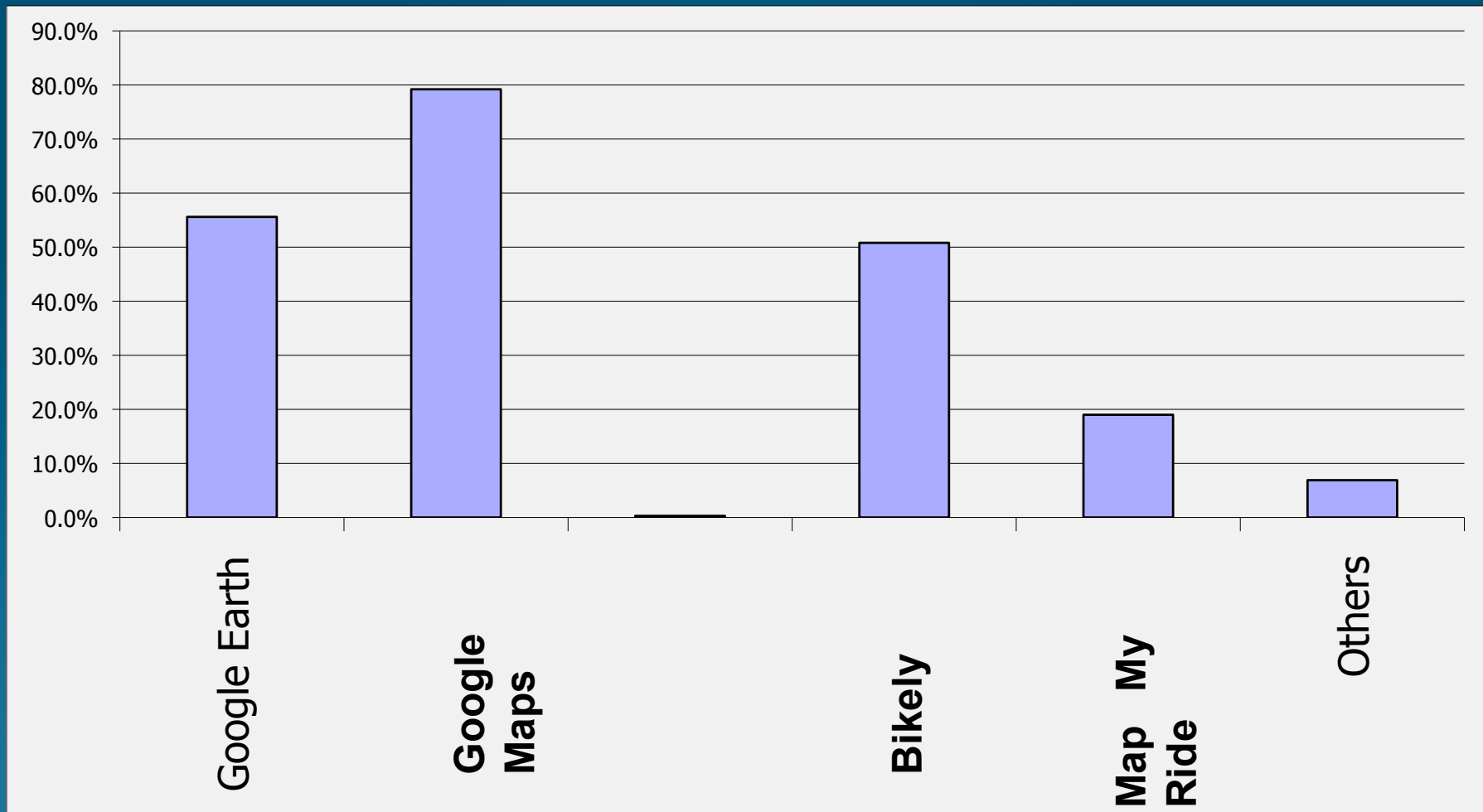
Online maps
For December 2010 the Top Search Queries for Google.com.au

- (Alexa 2010)

Query	Percent of Search Traffic
google	8.01%
google maps	6.66%
maps	2.54%
google australia	1.29%
youtube	0.94%
google map	0.81%
adwords	0.65%

UNIVERSITY OF
CANBERRA
AUSTRALIA'S CAPITAL UNIVERSITY

Summary

- *Cycling and Cycle Tourism are BIG*

- Online technologies
  - Interactive websites
  - Online maps, and,
  - Social networking tools

  are now the dominant source of information on cycle tourism events and destinations.

UNIVERSITY OF
CANBERRA
AUSTRALIA'S CAPITAL UNIVERSITY

5th Australian Cycle Tourism Conference

Canberra November 2011

Hosted by The University of Canberra

Supported by ACT Tourism

See you in late 2011 in the ACT - Australia's Cycling Territory

Thank You!!

UNIVERSITY OF
CANBERRA
AUSTRALIA'S CAPITAL UNIVERSITY