



future
transport

technology
inspiring innovation

Boating companion Innovation Challenge

Information Session
Tuesday 5th December 2017



Agenda



Information night
5 December

- Welcome & Introductions
- Maritime Safety – Neil Patchett (Centre for Maritime Safety, Transport for NSW)
 - State Government strategic plan for maritime safety in NSW
 - Strategic behaviour change program
 - National maritime safety context
- Maritime Regulation - Hendrik Clasié (Roads and Maritime Services)
 - Delivering regulatory services
 - Operational context
 - Aquatic events
- Boating Companion Innovation Challenge Details – Richard Tubb (Transport for NSW)
- Panel Q & A Discussion with SMEs
- Networking

Neil Patchett (Centre for Maritime Safety, Transport for NSW)

Maritime Safety



Basic Dimensions

- 2140km of coastline
- 5.5km offshore State limit
- 12,000 square km of navigable waters
- 20,000 vessels on moorings
- 233,000+ registered vessels
- 500,000+ people licenced to drive a powerboat
- 2 million people go boating each year
- + small paddle and sail craft, no registration required
- 10,000 commercial vessels
- Sydney ferry network - more than 16 million pax/ yr
- \$2.7 billion – estimated boating industry worth



240,000
recreationally
registered vessels



150,000+
rowing dinghies,
sailing craft, canoes
and kayaks



10,000+
commercial vessels



58,000+
personal water craft
licence holders



460,000
general boat licences

Evidence

- 15 fatalities a year (10yr average)
- Long term analysis shows:
 - older males in runabouts – risk group
 - 8 out of 10 people who drown when boating, weren't wearing a lifejacket
 - nearly all boating fatalities are preventable
 - a lifejacket is likely to double a person's chance of survival once immersed in water
- 4 fatalities in 2016-17;
 - lowest waterways toll in at least 40 years
 - 70% down on the long term average
- 330.5 incidents a year (10yr average)



Policy/ Strategy Response

- data collection
- research/ surveys
- evidence-based strategic analysis
- State Government priorities
- State Plan
- Future Transport 2056
- Maritime Safety Plan (2017)
- Federal Government priorities
 - Australian Water Safety Strategy
- consultation
 - RVAG
 - MAC
 - Forums (State, National and International)
- counter measures to waterways trauma
- regulatory process
- behaviour change programs
- compliance programs



Priority Safety Issues

- Lifejacket Wear
- Excess Alcohol
- PWC
- Weather
- Cold Water
- Paddlecraft
- Poor Judgement
- Proper Lookout
- Speed
- Towing



Maritime Safety Plan (2017)

- strategic direction for the maritime cluster
- 30% reduction in fatalities and injuries by 2021, and zero by 2057
- developed from evidence-based problem definitions.
- introduce the **Safer Systems** model
 - Safer People, Vessels and Waterways
- part of Future Transport 2056



Advertising

WEAR A LIFEJACKET DON'T RISK YOUR LIFE

- Wear a Lifejacket campaign launched in late 2012
- break down negative perceptions, promote wear rates
- Proven effective against communication objectives:
 - high campaign recognition (60%)
 - 8/10 people understand the importance of wearing a lifejacket
 - 2/3 of people intend to wear a lifejacket
- More work needed to bridge the gap between the intention to wear a lifejacket and the actual rate of wear
- Increasing focus on the care and service of inflatable lifejackets

Old4New mobile program

- 548 sites visited statewide promoting modern lifejacket awareness
- 21,748 Lifejacket upgrades
- 106,649 km travelled across NSW
- 60,000+ people engaged
- Supporting drowning prevention in rock fishing since 2016



Retail Partnerships

- 200 retailers engaged state-wide
- 60+ retail outlets signed up as formal Retail Partners to promote:
 - Wearing lifejackets
 - Awareness of the modern range
 - Upgrading to modern lifejackets



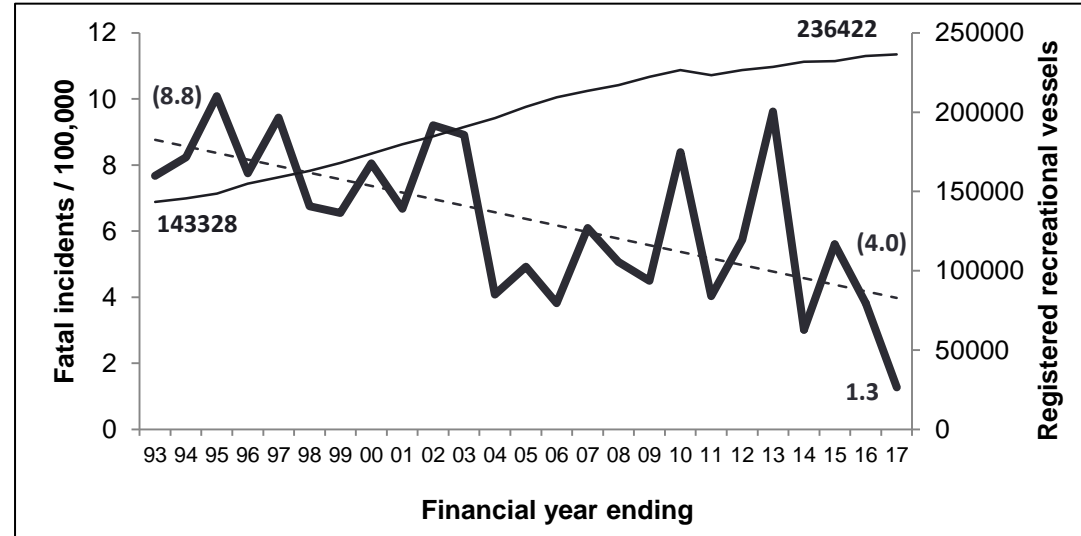
Lifejacket Wear Rate

- Former National Marine Safety Committee study recorded a wear rate of 9% (2007).
- A new lifejacket-wear observational study underway
 - 2013-14: 34%
 - 2014-15: 41%
 - 2015-16: 45%
 - 2016-17: 45.4%

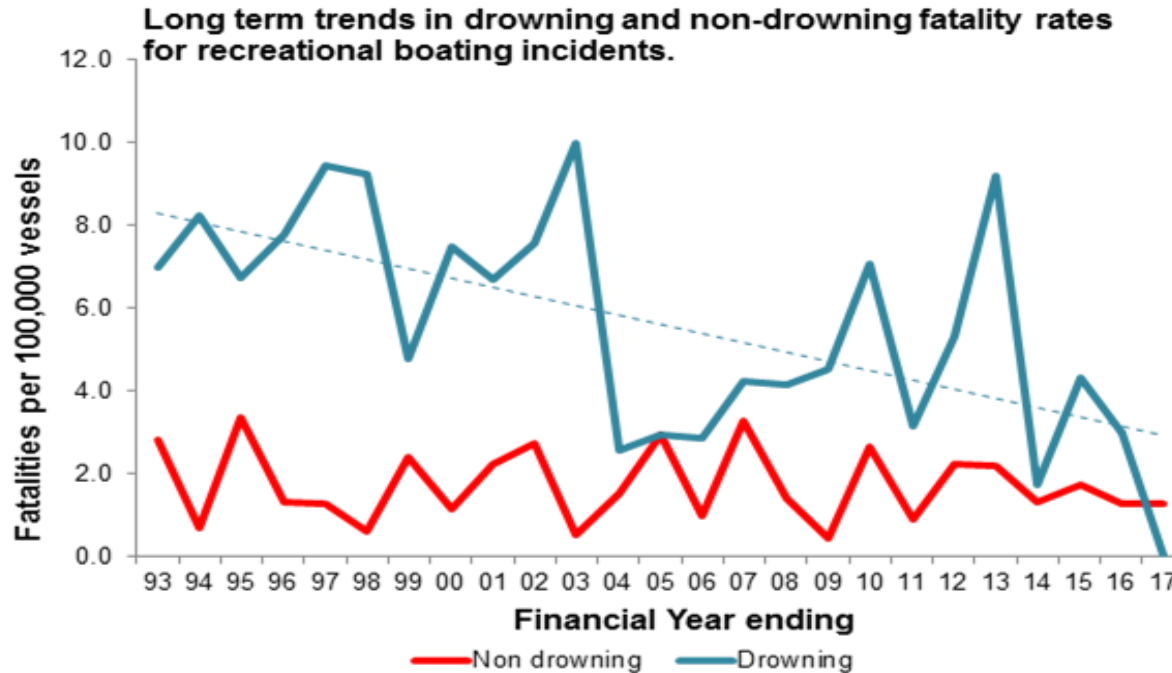


Fatalities

- The long-term fatality rate continues a downward trend
- The number of boat licences and registrations continue to increase



Drowning & Non-Drowning Fatalities



Serious injuries down



Total incidents down



Hendrik Clasie (Roads and Maritime Services)

Maritime Regulation

Boating Companion App

Maritime regulation



Our area of responsibility

NSW waterways



Our audience

The boating community

- Estimated **2 million** people go boating in NSW each year
- In NSW **~500,000 boat licence holders**
- **~250,000 registered vessels**
- Yachts, runabouts, personal watercraft, motor cruisers
- Kayaks, canoes, sailing dinghies
- Interstate – QLD and VIC borders



State waterways

12,500 km state navigable waterways

- Inland such as dam, lakes and rivers
- Offshore – jurisdiction to 3 NM from QLD to VIC borders
- Commonwealth waters to 12NM
- Recreational vessels administered at State level
- Commercial vessels administered at a national level



Managing the waterways

- Approx 650 aquatic licences issued each year
- Major aquatic events
- Wharf access in Sydney Harbour
- 26,000 moorings



Role of the regulator

Compliance

Encourage

- presence and incentive
- Standards and limitations

Educate

- knowledge and awareness

Enforce

- detection and appropriate action to modify behaviour



Boating incidents

The statistics

- Total of **254 reported incidents** in the 2016/2017 year
 - 4 fatalities
 - 78 serious injuries
- 2016-17 recorded the lowest fatality rate in recent years
- Combined fatality and serious injury rate remains steady
- **3 fatalities for 2017/2018 to date**

How we do it

Resources and Service Delivery

- **72** Boating Safety Officers
- **12** Boating Education Officers
- **32** Product Service Officers
- Transactional services through Service NSW
- Domestic Commercial Vessels through AMSA
- Conducted **61,066 vessel safety inspections**
 - **11.5% increase** on previous year
- **8,679** Daytime patrols - **28,168 hours**
- **330** Dawn/Night patrols - **1,886 hours**
- **731** reports of oil/pollution spills responded to

How we do it

Boating Education Officers

Engaged with **50,388 members** of the boating community (boat ramps, boat shows, stakeholder visits and presentations)

- 12,598 clients at boat ramps
- 2,636 boat ramp visits

250 events - 16,823 interactions



Keeping our waterways safe

How this App will help

- Key tool in engaging with the public
- Providing an additional source of information
- Help boaters to make decisions about their safety



Richard Tubb (Transport for NSW)

Innovation Challenge Details

About the challenge

- Transport for NSW (TfNSW) and Roads and Maritime Services (RMS) want you to pitch us on the development or update of a boating companion app to provide recreational boat users with information and tools for a safe and enjoyable journey!
- There are Maritime datasets which can be incorporated to assist in your development of the apps.
- There are top 10 priority safety issues from the Maritime Safety Plan which are ideally addressed by a consumer based app.



What does the app need to include?

The focus of the app should consider the top 10 safety issues but at a minimum provide safety information and information on marinas and facilities.

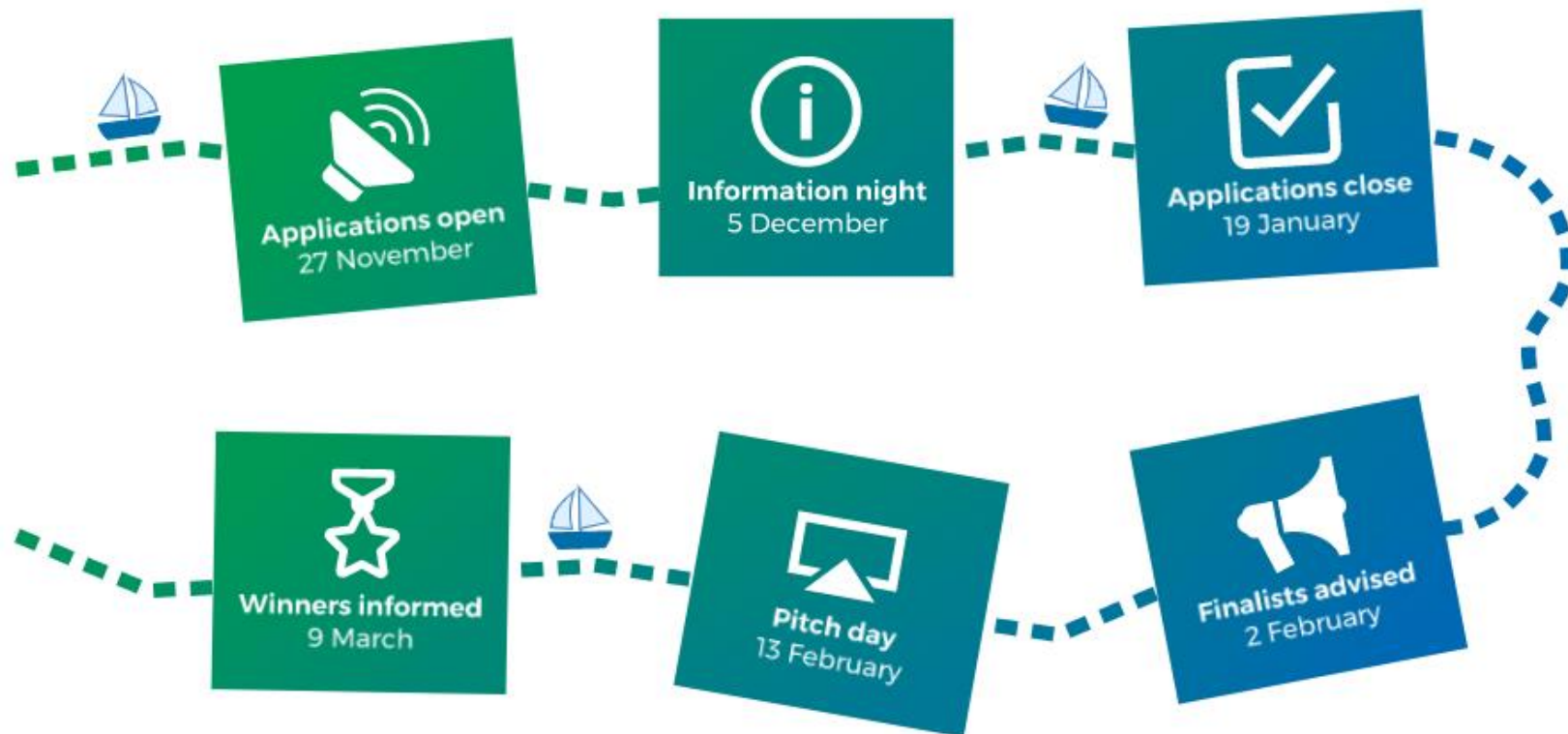
Features to be included in the app:

- Weather alerts and conditions, showing swell, tides and wind etc.
- Maps showing facilities for boat-ramps, restricted speed zones, navigational aids, fishing zones, marinas etc.
- Safety Checklists including information such as lifejacket requirements, for your vessel and planned trip
- Geographical coverage of NSW and its borders at a minimum; and other jurisdictions from around Australia as a desirable
- Safety alerts and other notifications to be provided by Transport for NSW and RMS as a feed to be communicated via in app notifications. Note the feed is in development and will be published and available via the Open Data hub.

Any app pitched would be expected to be available on both iOS and Android platforms.



Key Challenge Dates



Applications Now Open



Applications open
27 November

- The Open Data forum is a place where questions can be asked at any time

<https://opendataforum.transport.nsw.gov.au/>

Judging Criteria

- **Customer Experience** - Usability is a factor - is the solution appealing, effortless, intuitive and easy to use?
- **Market Feasibility** - Does your solution demonstrate knowledge of Transport's customer base and will it be available to most people?
- **Innovation** - Is your product unique and original, and does it demonstrate tangible technical innovations?
- **Commercial Sustainability** - Can your idea sustain its commercial momentum? Is it profitable in the long term?
- **Technical Feasibility** - Can you and your team deliver your idea? Can you demonstrate an understanding of technical inputs to app development and ensure technical stability?

Pitch Day



- Pitch Day will be held on Tuesday 13th February 2018.
Each pitching team will be allocated 10 minutes:
 - It is preferred if team are available in person
 - Up to 5 minutes for a presentation
 - 5 minutes for judges' Q&A session

Incubation



- Teams who are eligible for incubation and seed funding will be advised by Friday 9th of March 2018.
- Regular meetings and access to subject matter experts within Transport for NSW and RMS will be made available through the 'incubation' period.
- Beta launch date with Transport for NSW (TfNSW) and RMS targeted for end of June 2018.

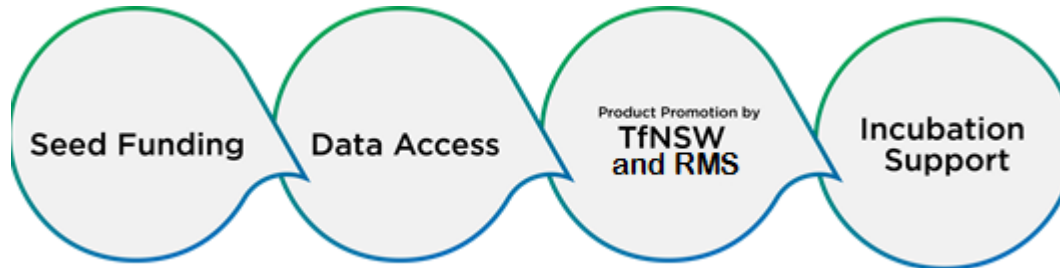
Examples of Data available



- *AidToNavigation*: channel markers and other aids to navigation (including courtesy and emergency moorings)
- *NoTowing*: areas where towing of persons is prohibited as designated by signs along the waterway
- *NoWash*: areas of no wash as designated by signs along the waterway
- *PublicWharf*: public wharves/jetties
- *RestrictedZone*: areas of restricted waters for port security or naval purposes
- *ShallowWater*: areas of assumed shallow water (depth of less than approximately 2 metres in tidal waters and the shallower water in inland waters at full supply)
- *Speed*: areas of speed restrictions (in knots) as designated by signs along the waterway
- *WebCamera*: locations of bar cameras, including URLs to webpages on the RMS Internet site for viewing of the live feed
- *BoatRamp*: BoatRamp data can be downloaded from Transport Open Data portal.

Why Get Involved

- Better minds can solve the problem better than us
- Seed funding available
- Access to customers (promotion by RMS and TfNSW)
- Access to data and integration
- Incubation support to get your product live
- Ongoing support and partnership with transport agencies



Q&A

Questions?

Post to Twitter [Transport Open Data](#) @DataTfNSW

Email to opendataprogram@transport.nsw.gov.au

Appendix

Customer Journey Map



Top 10 Priority Safety Issues

- **Poor judgement** - Poor judgement or lack of judgement are usually amongst other top causes for incidents.
- **Lifejacket wear** - Lifejackets are the most important piece of safety equipment on any recreational vessel. An approved lifejacket must be carried for each person on board most vessels.
- **Personal watercraft (PWC) risk management** - Personal watercraft (PWC) is defined as vessels with a fully enclosed hull that may be driven standing up, lying down, sitting astride or kneeling, a definition which includes jet powered surfboards and jetskis.
- **Towing activities** - this includes on water “towing” such as water-skiing, wakeboarding, kneeboarding, tubing and similar sports such as wake surfing.
- **Cold water** - risks due to cold water shock and hypothermia.



Top 10 Priority Safety Issues (con't)

- **Paddle/oared craft risk management** - Canoes and kayaks are classified as paddle-craft. These vessels are small and sit low in the water, making them difficult to see for boaters in other vessels under certain conditions (e.g. rough weather, or low visibility).
- **Speed** - All vessels must travel at a safe speed at all times. A safe speed cannot be expressed as a maximum or minimum number of knots because it varies with circumstances and conditions.
- **Excess alcohol** - When afloat, coordination, judgement, vision, balance and reaction time can decline up to three times faster after consuming alcohol. Driving under the influence of alcohol or drugs is an offence. Permissible concentration of alcohol limits are as follows:
 - 0.00 for recreational vessel operators under 18 years of age
 - Less than 0.05 for recreational vessel operators over 18 years of age.
- **Weather conditions** - Weather conditions and lack of preparation and planning pose a significant threat to the boating public.
- **Proper lookout** - The skipper is responsible at all times for keeping a lookout for dangers.

