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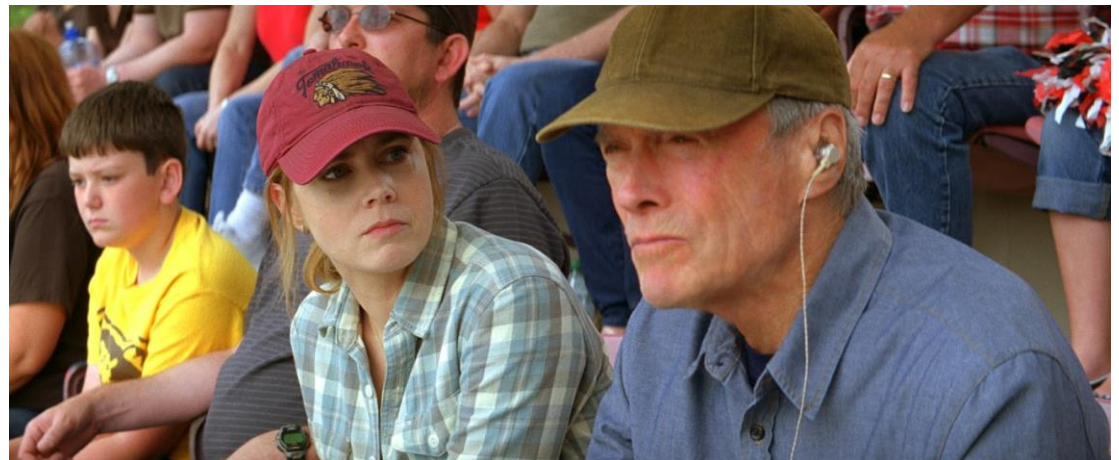
# ATHLETE CONVERSION

## POWERING PODIUMS – MARCH 2019



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# Introduction





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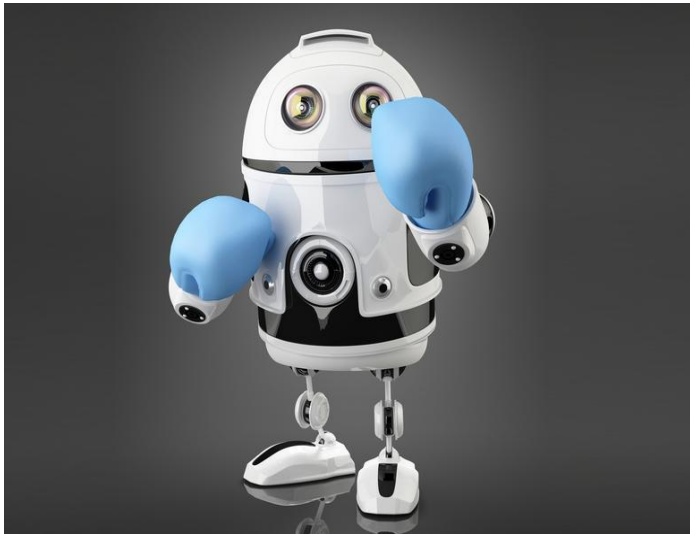
*Statistics are like bathing  
suits – they show a lot,  
but not everything*



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# Introduction

- Neither approach tells the complete story.





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## *Why is data management important?*

- Informs decision-making
- Gets more pieces of the puzzle
- Helps project future value and performance
- Reduces systematic and personal biases



# Data-Informed Decision-Making

## *Essential in following industries:*

- Higher education (Marketwire, 2016)
- Insurance (Roesner, 2016)
- Manufacturing (Feehan, 2016)
- Pharmaceuticals (LabX, 2018)

## *Data vs. Information* (Dalcher, 2015)

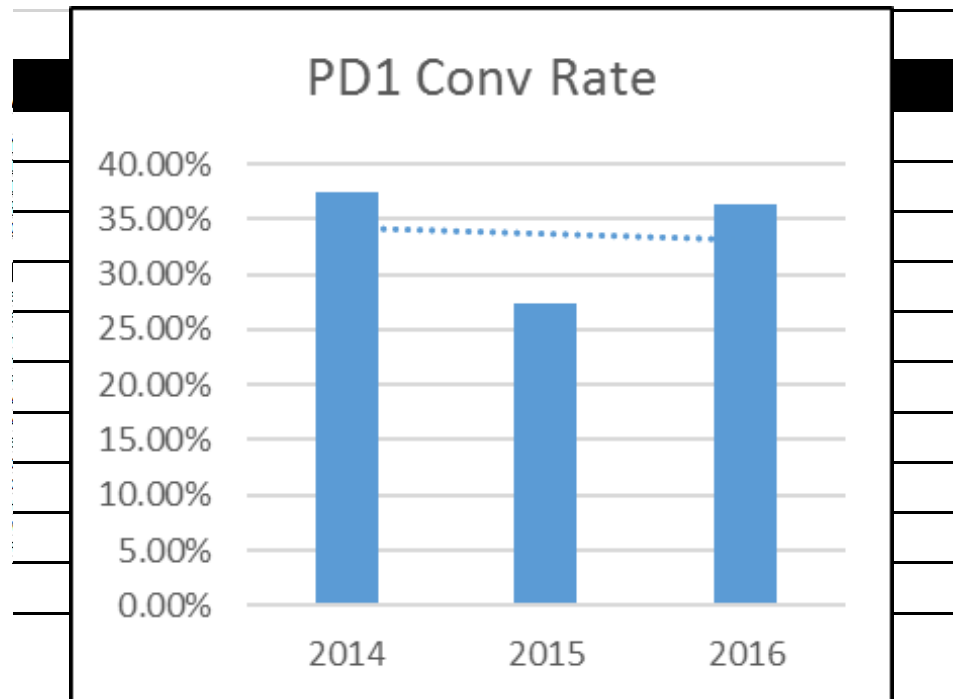
- **Data** is the distinct facts, numbers, words and images; the raw input of organisational life.
- Once, they are processed in some meaningful way, they become **information** that is interpreted and understood for a particular purpose.



# Data Management

Process involves four steps:

1. Collecting data
2. Cleaning the data
3. Analyzing the data
4. Using the data





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# Athlete Targeting Criteria

- Outside of competition, what are you doing to identify high potential athletes?
  - Event-based vs. Performance-based
- Without the resources (budget, capacity, etc.) to monitor every athlete in the province, can data analysis help to identify those “diamonds in the rough”?
  - National program vs. Provincial program



# Athlete Targeting Criteria

## Event Based

- Medalled at Nationals
- Competed at Worlds
- Selected to Team Canada



## Performance Based

- Achieved 90% of Senior International standard
- Submitted PSO-directed testing results 4x / year
- Hit minimum standard in 75% of T2C GMP benchmarks



# Nomination Lists

Last Name	First Name	Level	Gender	Date of Birth (YYYYMM/DD)	Sport Discipline	Primary Coach	Primary Coach's Email	Secondary Coach	Campus/Centre	City/Town
Smith	Brian	Canadian Dev	Male	1986/01/13	Recurve	John Wooden	example@coach.ca	Dean Smith	Vancouver	Burnaby
Smith	Levi	Canadian Dev	Male	1998/05/16	Recurve	John Wooden	example@coach.ca	Dean Smith	Okanagan	Kelowna
Smith	Tom	Canadian Dev	Male	1998/09/04	Recurve	John Wooden	example@coach.ca	Dean Smith	Fraser Valley	Maple Ridge
Smith	Lewis	Provincial Dev Level 1	Male	1998/10/09	Recurve	John Wooden	example@coach.ca	Dean Smith	Vancouver	North Vancouver
Smith	Frank	Provincial Dev Level 1	Male	1999/02/08	Recurve	John Wooden	example@coach.ca	Dean Smith	Northern BC	Prince George
Smith	Shane	Provincial Dev Level 1	Male	1997/02/23	Recurve	John Wooden	example@coach.ca	Dean Smith	Victoria	Victoria
Smith	Miya	Provincial Dev Level 2	Female	1997/12/22	Recurve	John Wooden	example@coach.ca	Dean Smith	Northern BC	Prince George
Smith	Mariessa	Provincial Dev Level 2	Female	1998/02/17	Recurve	John Wooden	example@coach.ca	Dean Smith	Fraser Valley	Abbotsford
Smith	Emma	Provincial Dev Level 2	Female	1998/03/08	Recurve	John Wooden	example@coach.ca	Dean Smith	Vancouver	North Vancouver
Smith	Toby	Provincial Dev Level 2	Male	1999/03/21	Recurve	John Wooden	example@coach.ca	Dean Smith	Fraser Valley	Maple Ridge
Smith	Elissa	Provincial Dev Level 2	Female	2000/04/09	Recurve	John Wooden	example@coach.ca	Dean Smith	Fraser Valley	Surrey
Smith	Toni	Provincial Dev Level 2	Male	1997/04/05	Compound	John Wooden	example@coach.ca	Dean Smith	Northern BC	Prince George



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# Nomination Lists

Annual nomination lists provide the following information to do statistical analysis:

- Athlete level
- Gender
- Date of birth
- Sport discipline
- Primary / Secondary coach
- Region / City



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# Statistical Measures

- Conversion Rates: Sport-Specific
- Conversion Rates: System
- Athlete Ages: Targeting
- Athlete Ages: Conversion



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## Background

- 10+ years data
  - IPS, now EE
- Various levels
  - Now simplified into 4 levels in HP pathway
- Using annual nomination lists we evaluate the % of athletes nominated who converted up to a higher level in the pathway.
  - \*Can jump 1, 2, or 3 levels
  - \*Note, successful conversions need to happen within 3 years



# Conversion Rates: Sport-Specific

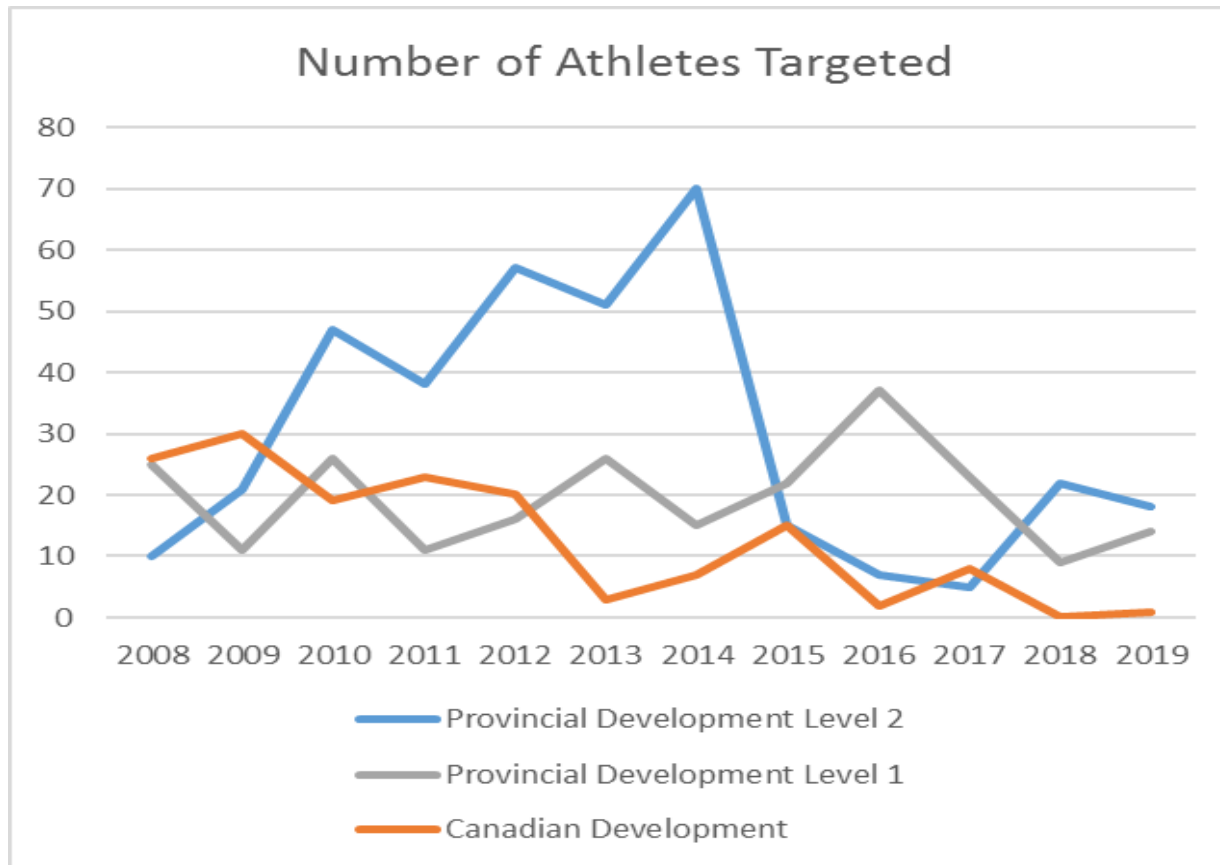
*What story can this data tell us about our HP program?*

- Important to not only look at the data, but ask the question “why is the data telling us this?”
  - Trend Analysis
    - Consistency / Variability with # athletes nominated
    - Conversion rate year-to-year
  - Differences between Male and Female conversion
  - Conversion before/after program interventions (e.g. new coach, broader targeting strategy, etc.)
  - Projections / Future trends





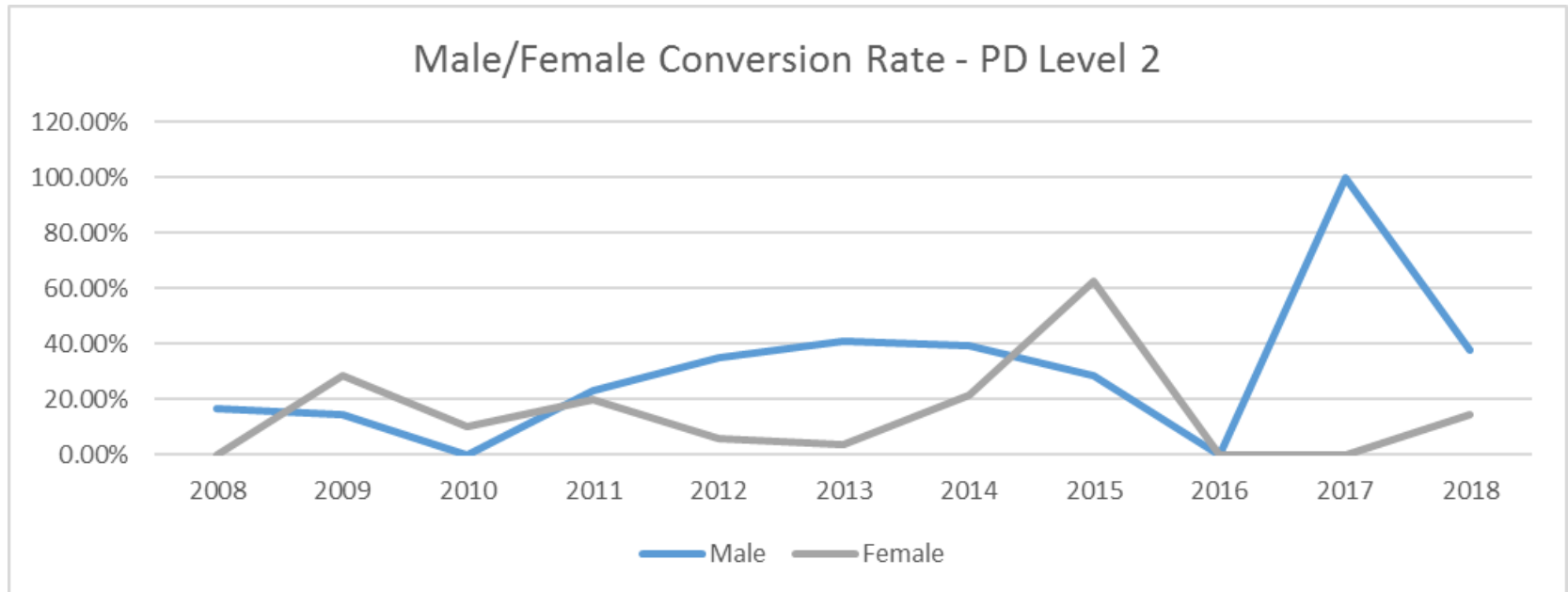
# Conversion Rates: Total Athletes Targeted





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# Conversion Rates: M/F Conversion





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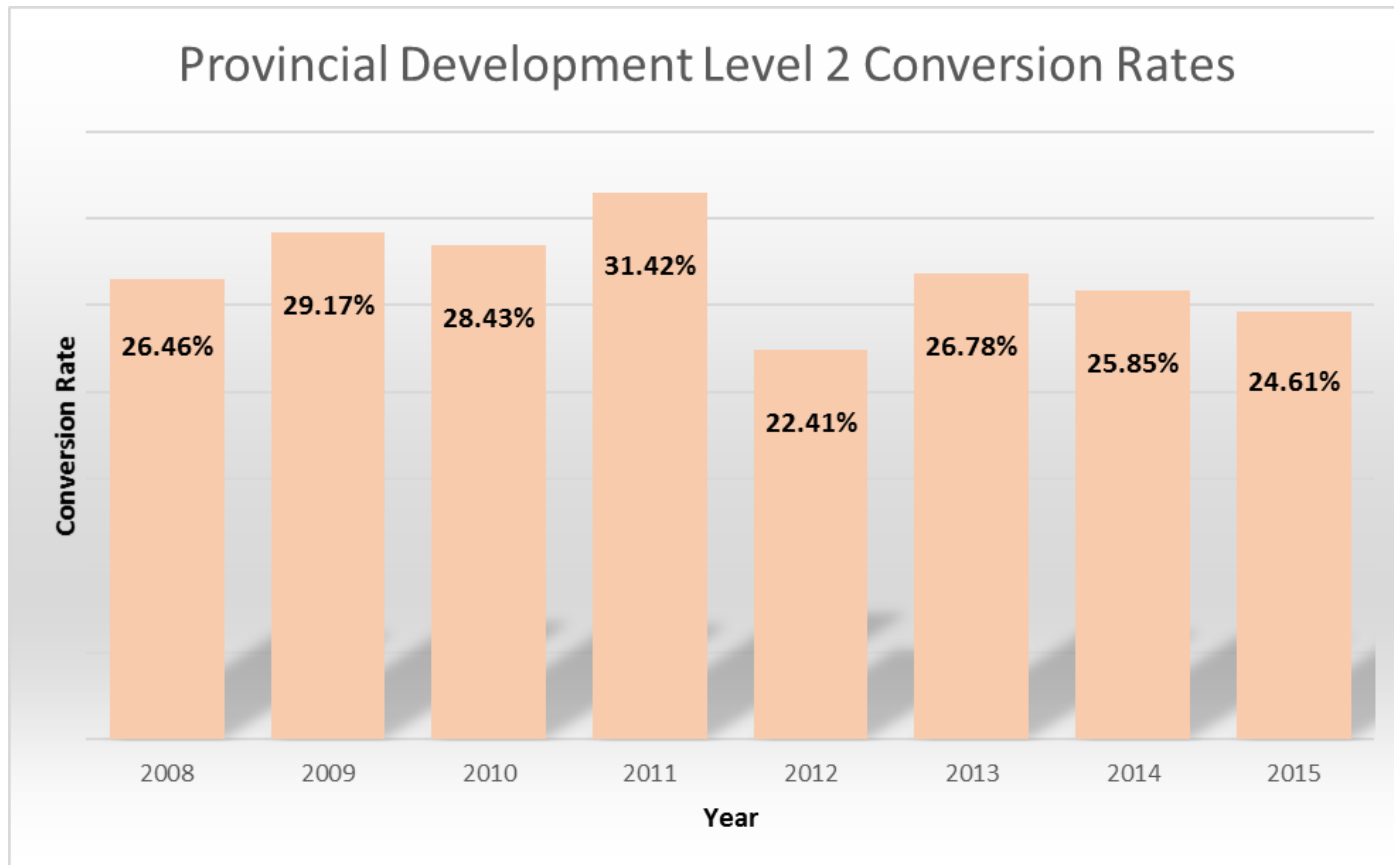
# Conversion Rates: System

*What story can this data tell us as a province, sector, and/or system?*

- General baselines / targets for conversion
- Categorical comparison
  - Individual Sports vs. Team Sports
  - Male vs. Female
  - AB vs. Para
- Impact of CSI / PacificSport registration

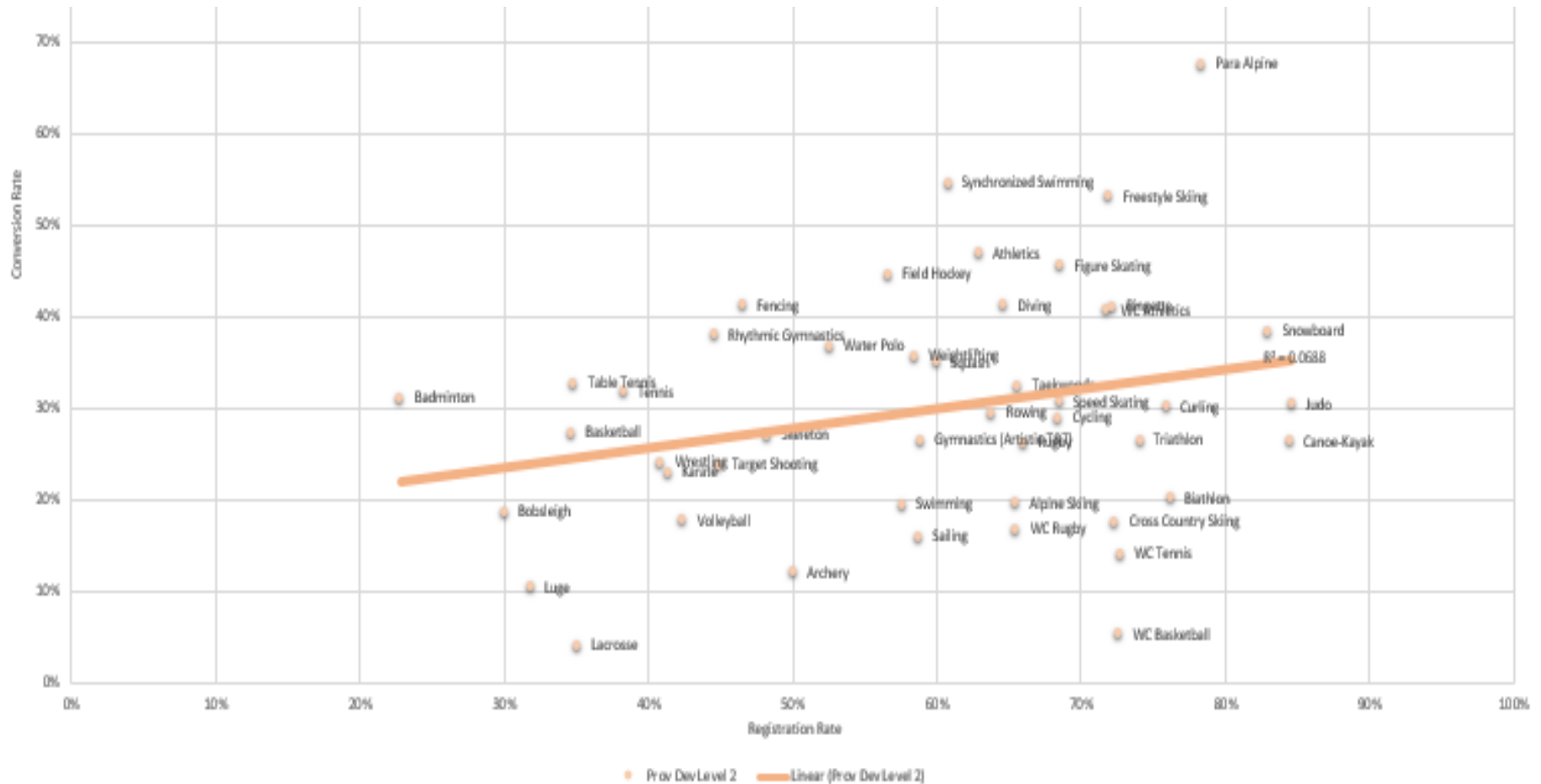


# Conversion Rates: System





# Conversion Rates: Conversion v Registration





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# Athlete Ages: Targeting

- Best utilized in sport-specific context, difficult to compare across sports
- Specific age metric not as important as relative age
  - What is the age range athletes are targeted in your sport?
  - Is this consistent, is it highly variable, and why?
  - Are there significant age gaps that aren't getting targeted or receiving support, and are these opportunities for you to engage?



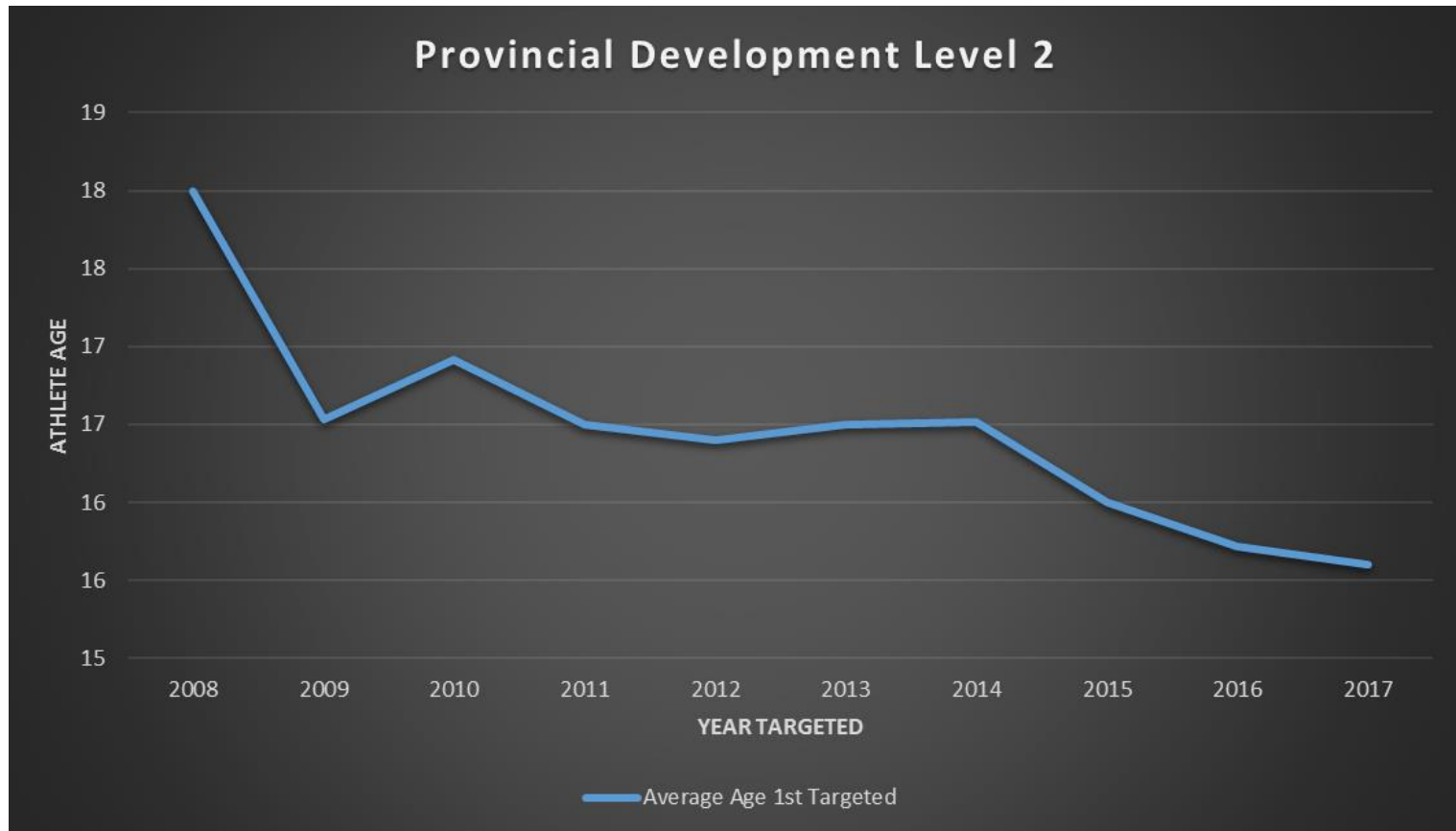
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# Athlete Ages: Conversion

- Best utilized in sport-specific context, difficult to compare across sports
  - Does the age your top athletes (those converting) align with the range of athletes you are targeting?
  - Are you targeting athletes too young, or too old in your criteria?
  - Are you allowing athletes enough time in the system to realistically convert to higher levels?



# Athlete Ages: Conversion

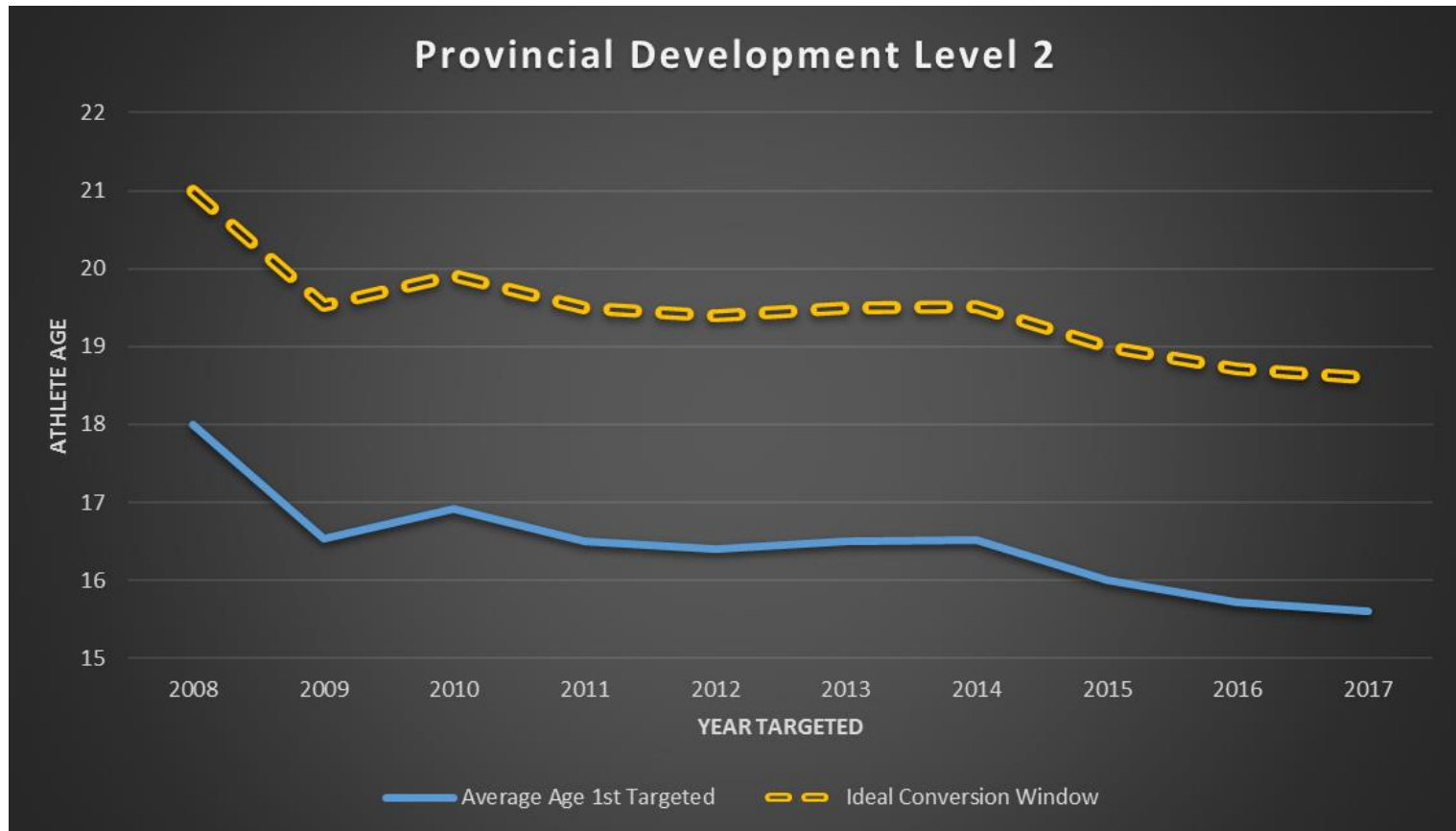






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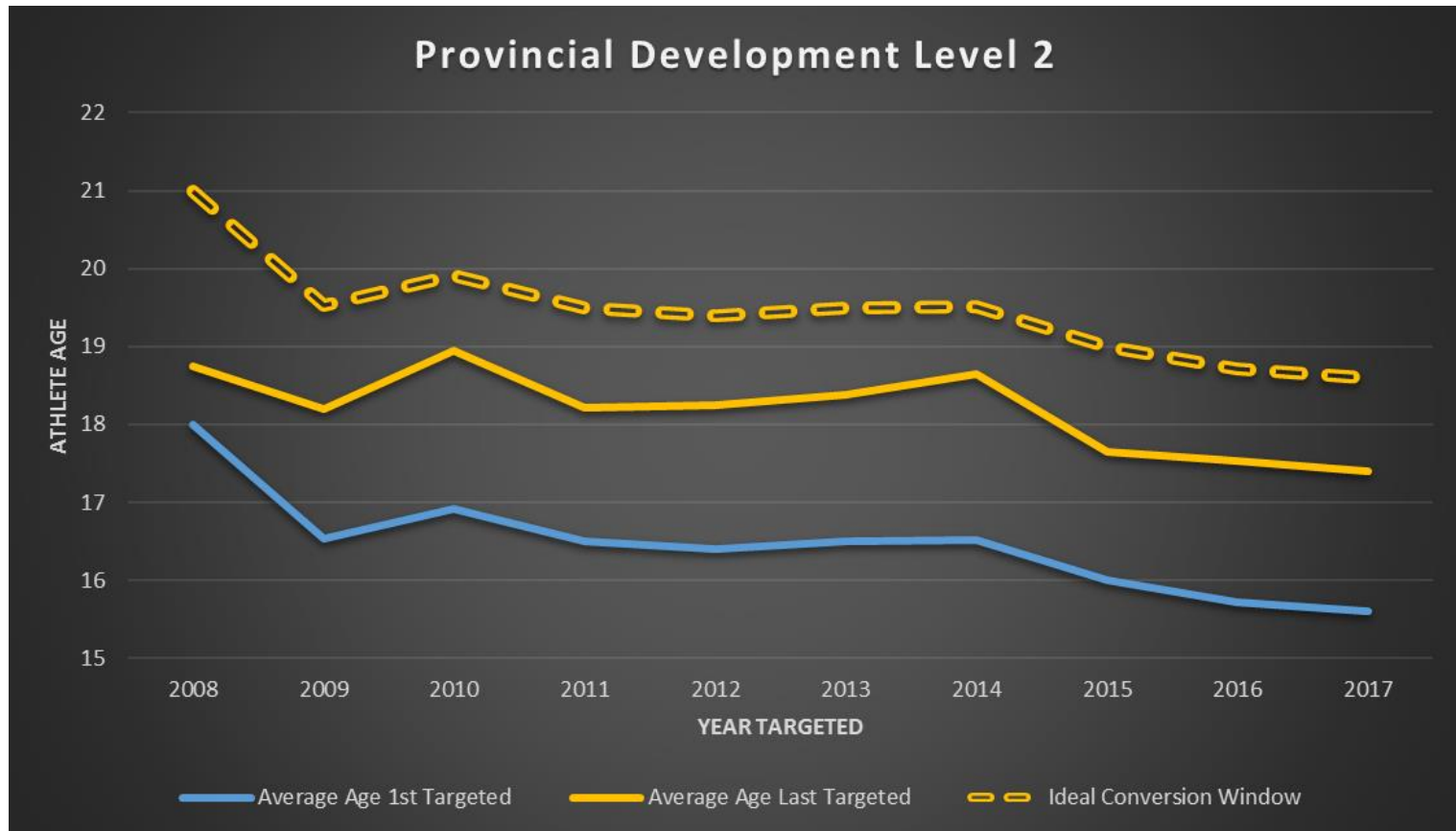
# Athlete Ages: Conversion





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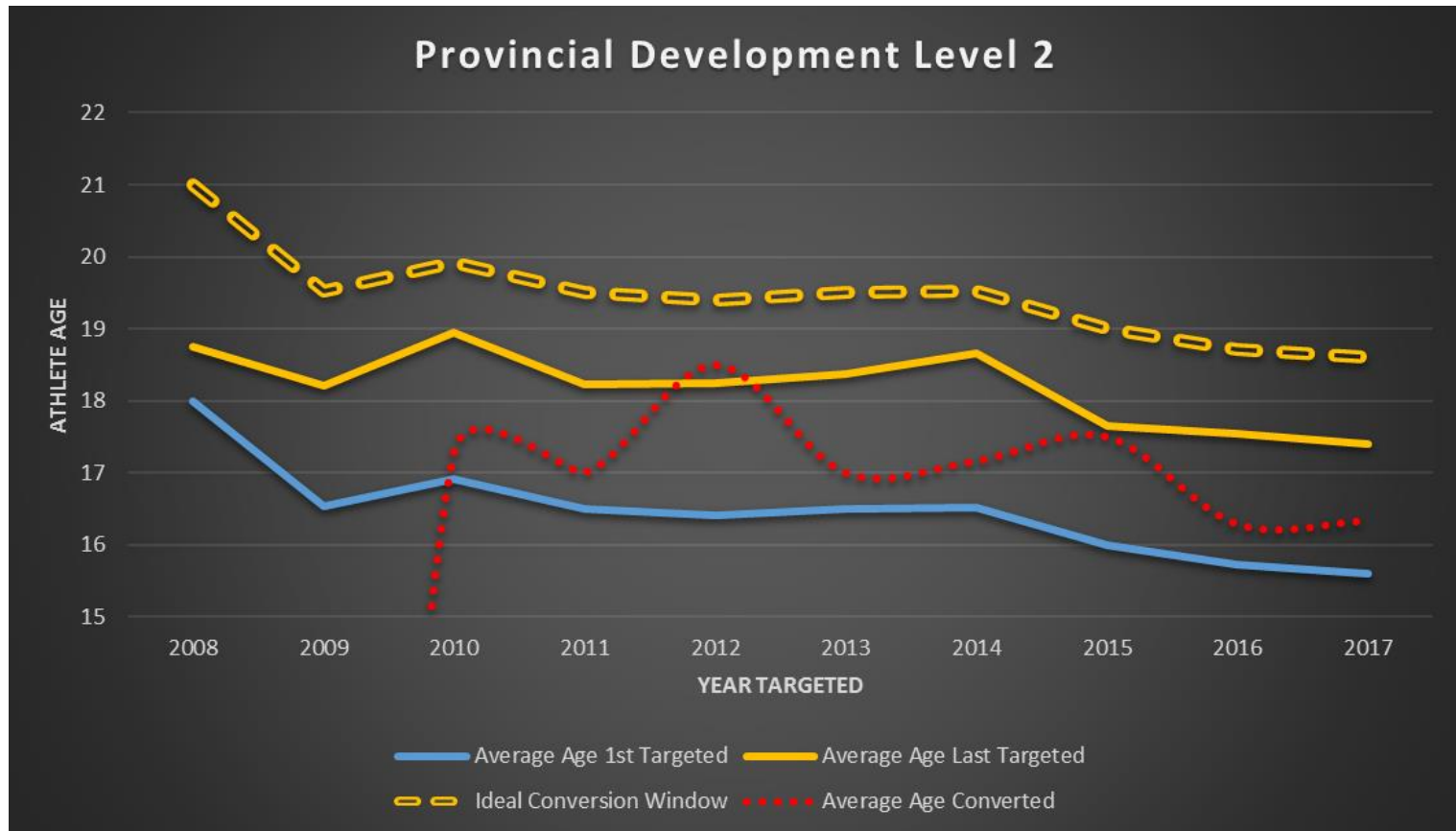
# Athlete Ages: Conversion





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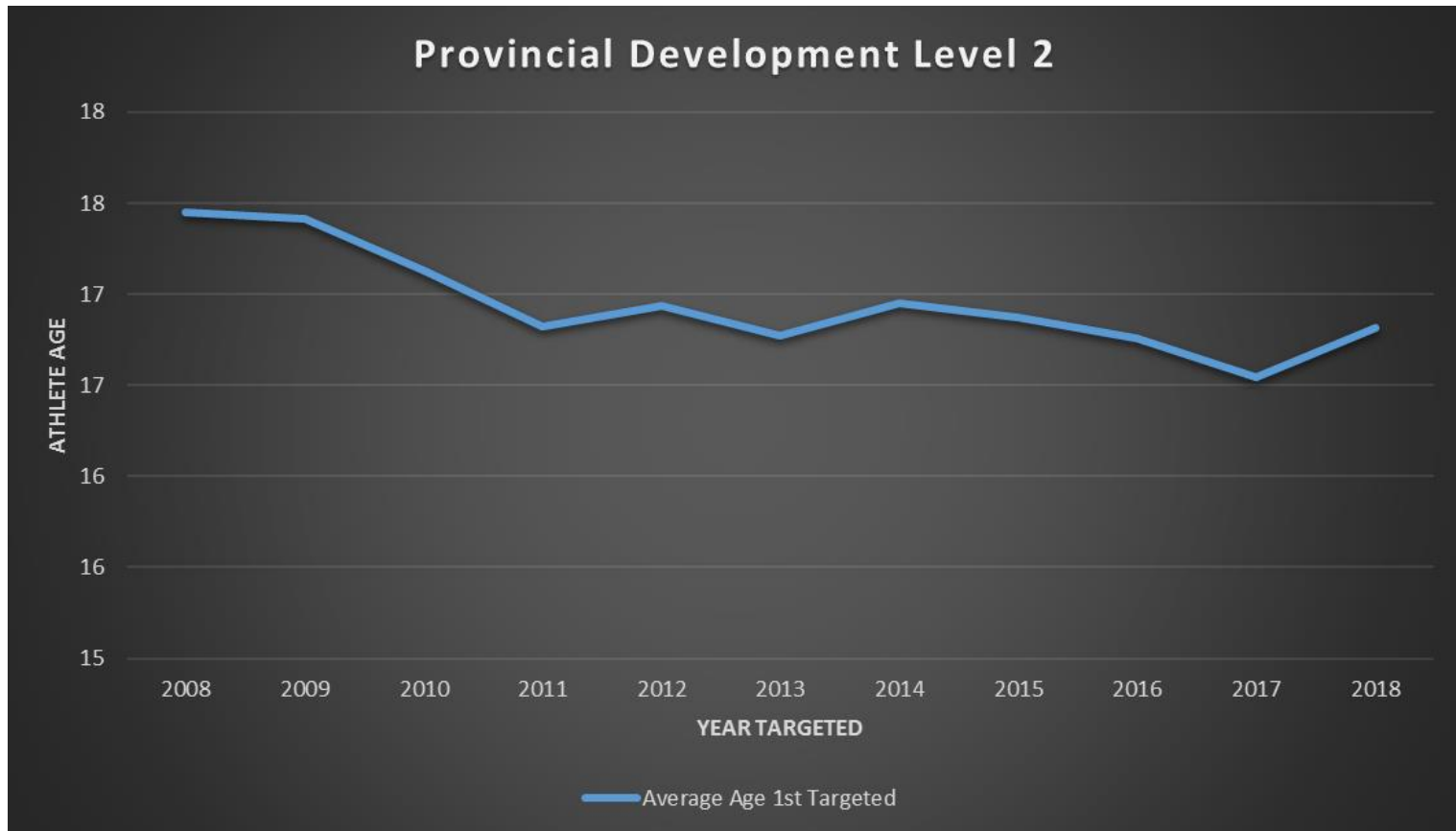
# Athlete Ages: Conversion





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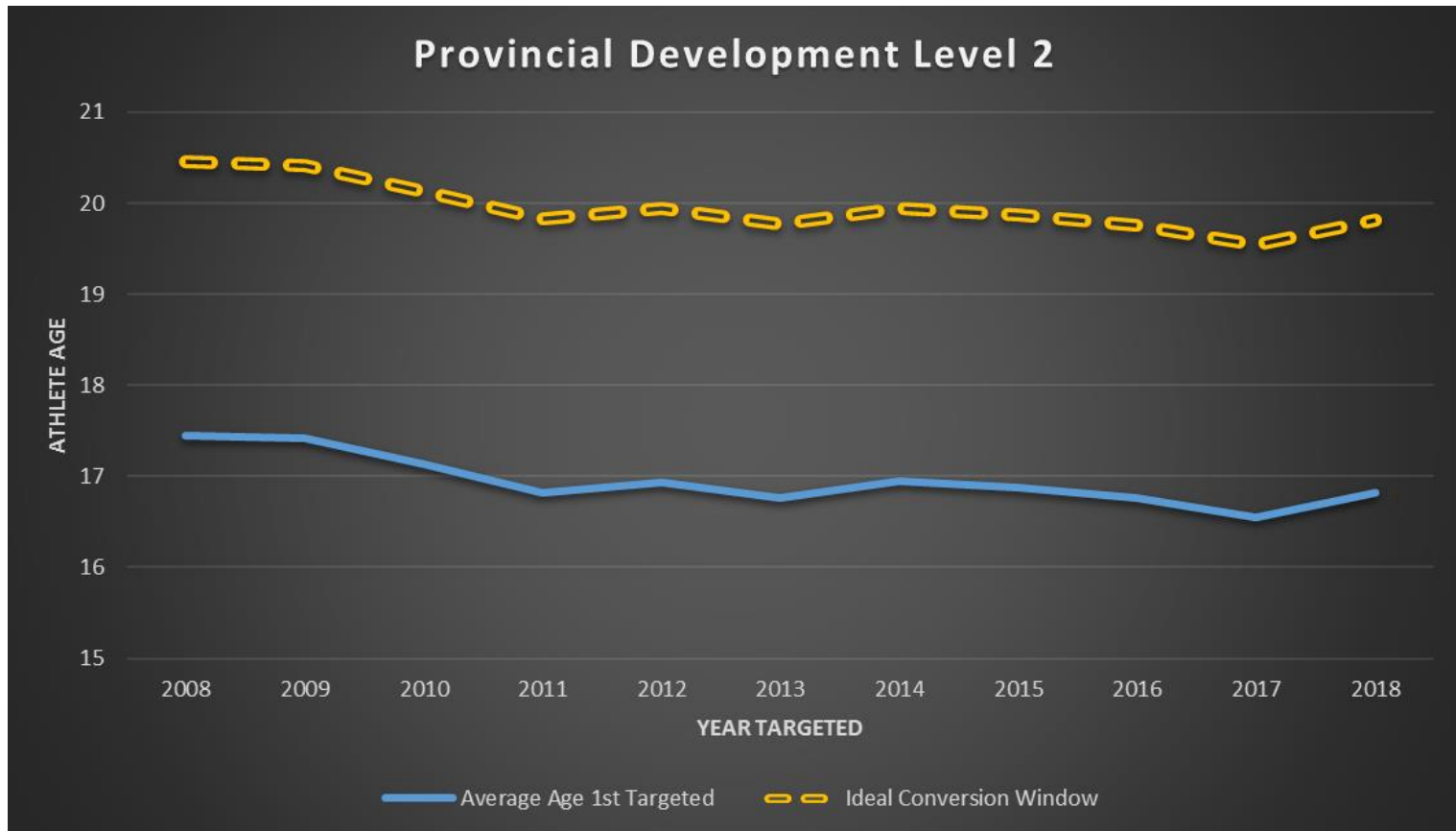
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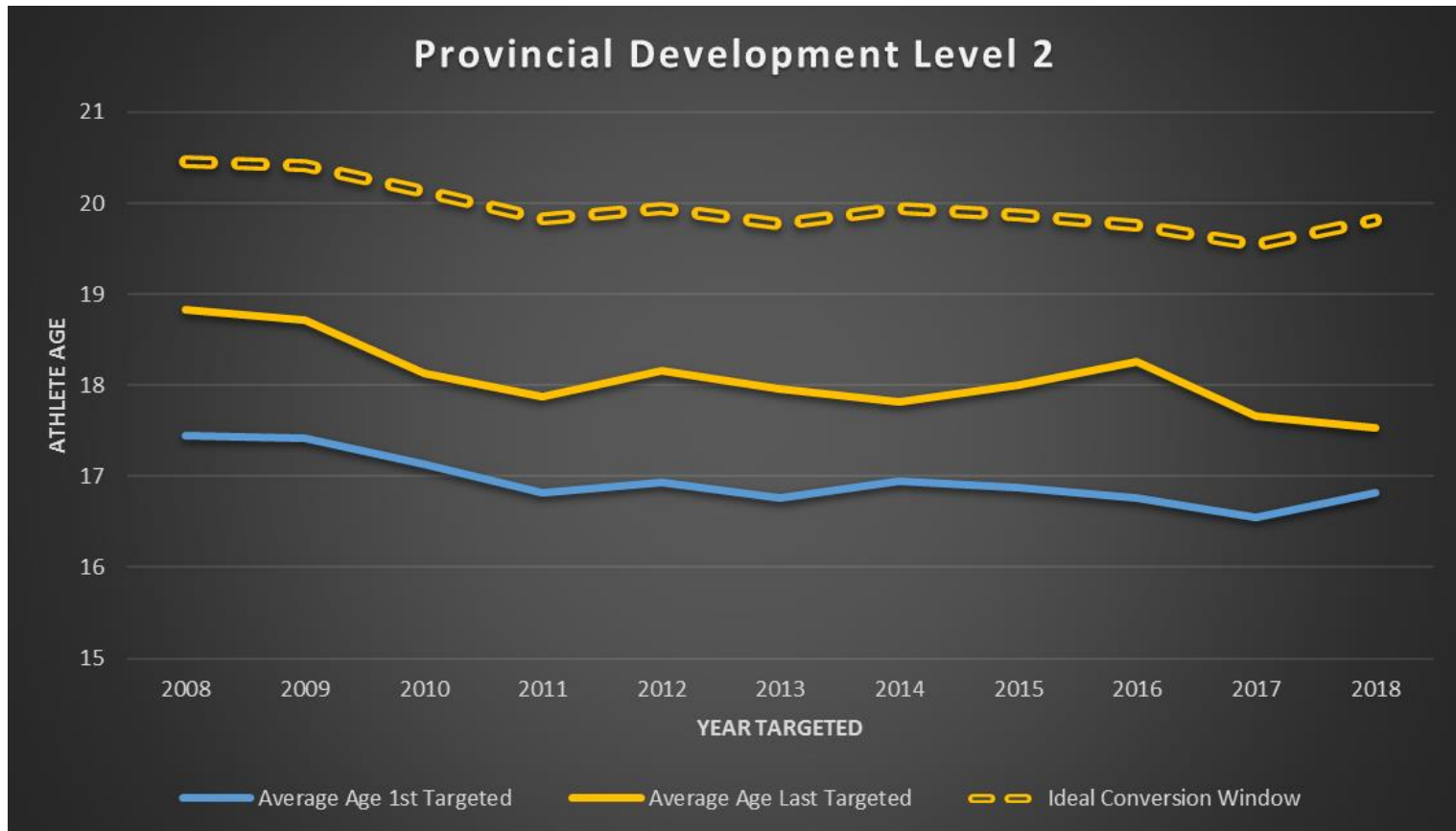
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# Athlete Ages: Conversion





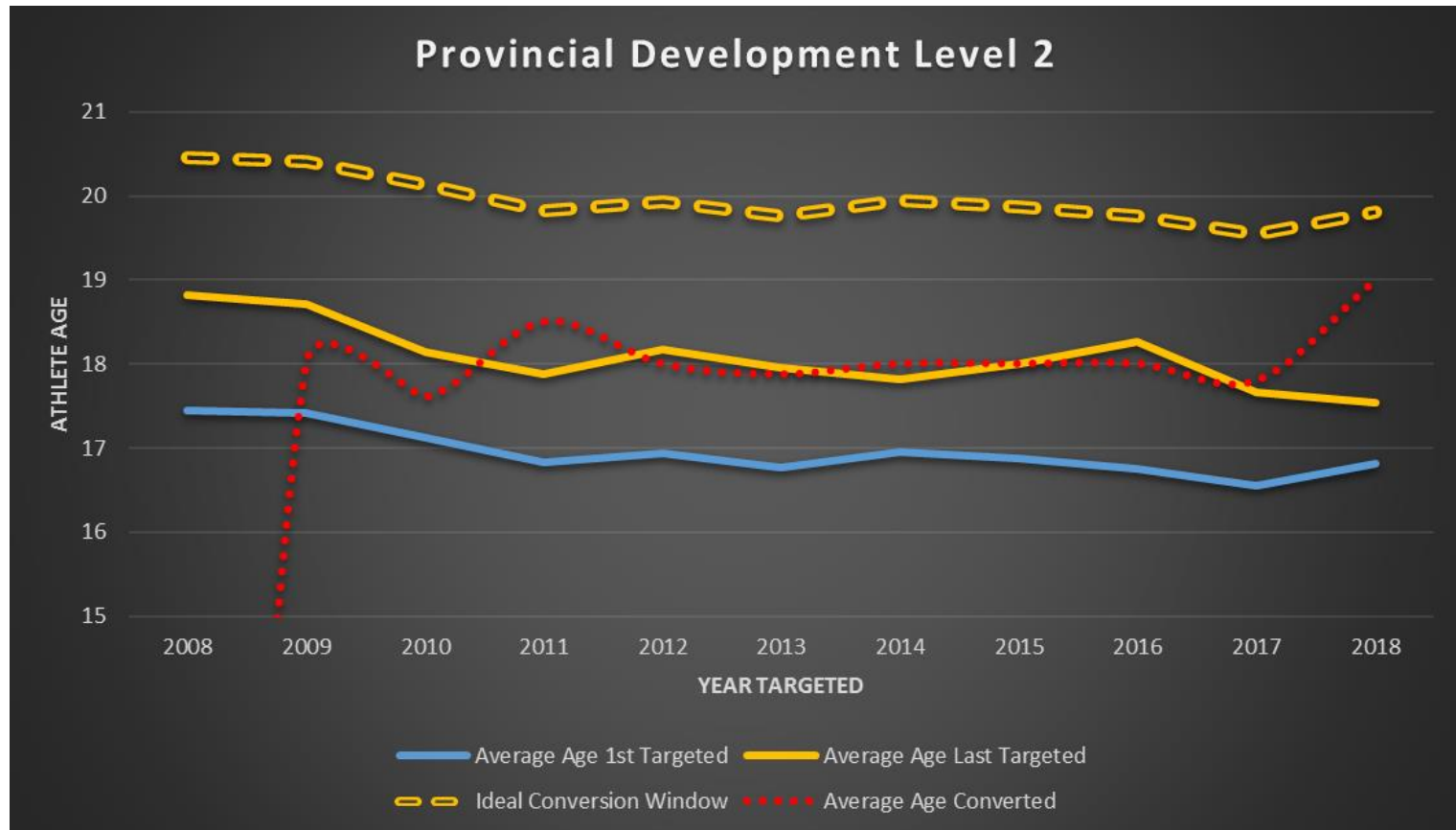
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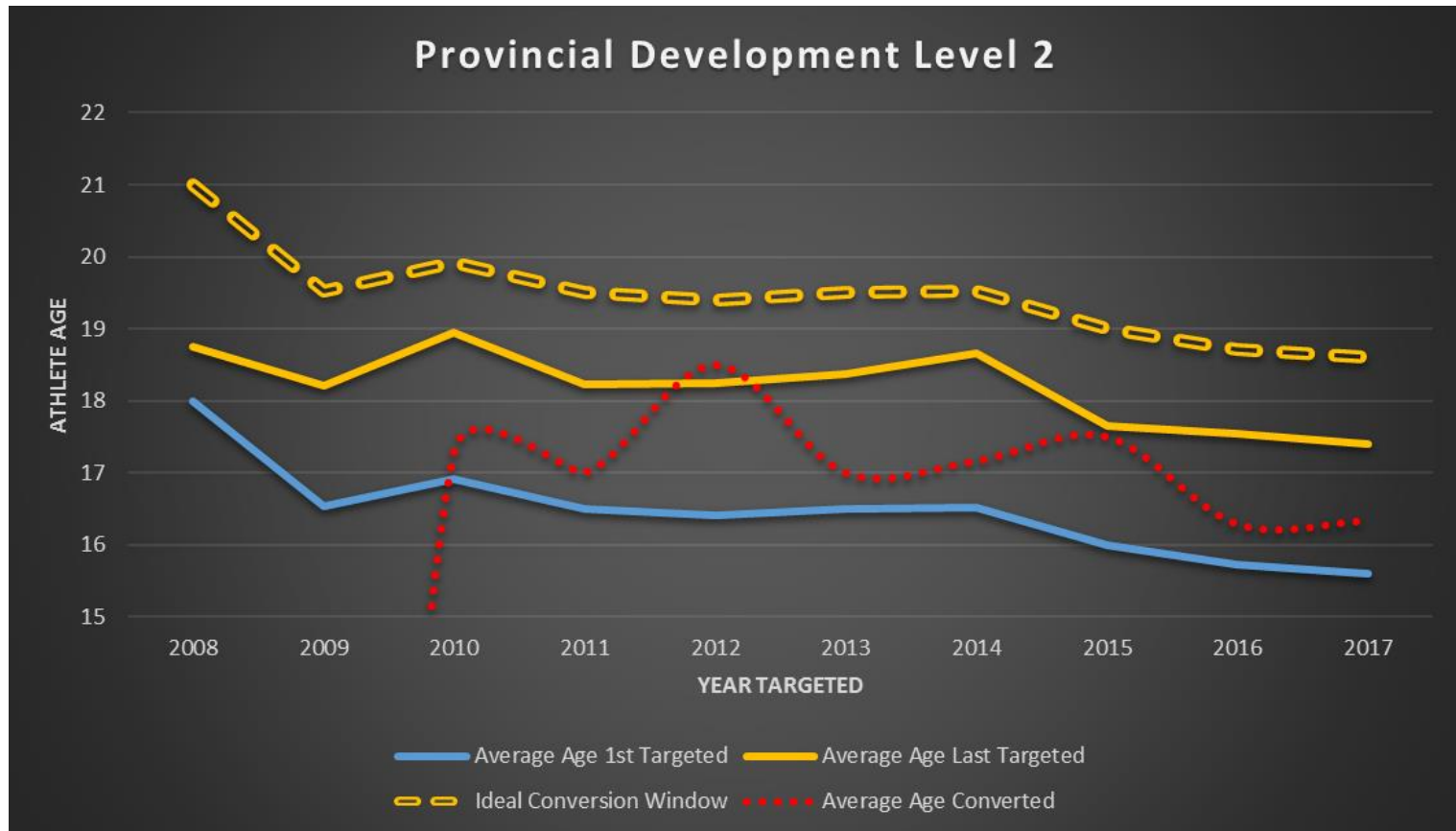






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# Athlete Ages: Conversion







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## Conclusion

- While days of the “eye test” are over, data doesn’t tell the whole story
- Good data collection and cleaning practices are essential to informed decision-making
- Nomination criteria / lists are informing much of our sport and system analyses
- The critical question is “why”
- CSI Pacific is doing a lot of this work already, and we can share and/or work with you on your current system

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