

Australian Police Drug Testing Dashboard

Usability Testing Instructions & Feedback Form

Data Visualization Project

November 28, 2025

Contents

| | | |
|----------|--|----------|
| 1 | Testing Session Information | 3 |
| 2 | PART 1: PARTICIPANT INSTRUCTIONS | 3 |
| 2.1 | Welcome & Introduction | 3 |
| 2.1.1 | What to expect: | 3 |
| 2.1.2 | Before we begin: | 3 |
| 2.1.3 | Important Notes: | 3 |
| 3 | PART 2: TASK COMPLETION EXERCISES | 4 |
| 3.1 | Task 1: Basic Navigation & Overview | 4 |
| 3.1.1 | Instructions: | 4 |
| 3.1.2 | Completion Criteria: | 4 |
| 3.1.3 | Facilitator Notes: | 4 |
| 3.2 | Task 2: Finding Specific Data Points | 4 |
| 3.2.1 | Instructions: | 4 |
| 3.2.2 | Completion Criteria: | 4 |
| 3.2.3 | Facilitator Notes: | 4 |
| 3.3 | Task 3: Comparing Jurisdictions | 5 |
| 3.3.1 | Instructions: | 5 |
| 3.3.2 | Completion Criteria: | 5 |
| 3.3.3 | Facilitator Notes: | 5 |
| 3.4 | Task 4: Using Advanced Filters | 5 |
| 3.4.1 | Instructions: | 5 |
| 3.4.2 | Completion Criteria: | 5 |
| 3.4.3 | Facilitator Notes: | 5 |
| 3.5 | Task 5: Geographic Analysis | 6 |
| 3.5.1 | Instructions: | 6 |
| 3.5.2 | Completion Criteria: | 6 |
| 3.5.3 | Facilitator Notes: | 6 |
| 3.6 | Task 6: Export & Data Analysis | 6 |
| 3.6.1 | Instructions: | 6 |
| 3.6.2 | Completion Criteria: | 6 |
| 3.6.3 | Facilitator Notes: | 6 |
| 4 | PART 3: SYSTEM USABILITY SCALE (SUS) | 7 |
| 4.0.1 | Instructions: | 7 |
| 4.0.2 | SUS Score Calculation: | 7 |
| 5 | PART 4: OPEN FEEDBACK QUESTIONS | 8 |
| 5.1 | Overall Experience | 8 |
| 5.2 | Visual Design & Layout | 8 |
| 5.3 | Navigation & Interaction | 8 |
| 5.4 | Content & Data | 8 |

| | | |
|-----------|---|-----------|
| 6 | PART 5: SPECIFIC FEATURE FEEDBACK | 9 |
| 6.1 | Chart Types | 9 |
| 6.2 | Interactive Features | 9 |
| 7 | PART 6: TECHNICAL ISSUES & PERFORMANCE | 9 |
| 7.1 | Performance Issues | 9 |
| 7.2 | Browser/Device Compatibility | 10 |
| 8 | PART 7: TIME TRACKING | 10 |
| 8.1 | Session Timing | 10 |
| 8.2 | Task Success Summary | 10 |
| 9 | PART 8: FACILITATOR OBSERVATIONS | 10 |
| 9.1 | Participant Behavior | 11 |
| 9.2 | Usability Issues Identified | 11 |
| 9.2.1 | Critical Issues (blocking task completion): | 11 |
| 9.2.2 | Major Issues (significant difficulty): | 11 |
| 9.2.3 | Minor Issues (slight inconvenience): | 11 |
| 9.3 | Positive Observations | 11 |
| 9.3.1 | What worked well: | 11 |
| 9.3.2 | Unexpected positive discoveries: | 11 |
| 10 | PART 9: RECOMMENDATIONS & NEXT STEPS | 11 |
| 10.1 | Priority Improvements | 11 |
| 10.1.1 | High Priority (Critical): | 11 |
| 10.1.2 | Medium Priority (Important): | 12 |
| 10.1.3 | Low Priority (Nice to have): | 12 |
| 10.2 | Additional Comments | 12 |
| 11 | PART 10: CONCLUSION | 12 |
| 11.1 | Session Wrap-up | 12 |
| 11.2 | Thank You & Follow-up | 12 |
| 12 | FACILITATOR GUIDE | 12 |
| 12.1 | Before the Session | 12 |
| 12.2 | During the Session | 13 |
| 12.2.1 | Introduction (2-3 minutes): | 13 |
| 12.2.2 | Task Completion (15-18 minutes): | 13 |
| 12.2.3 | Questionnaires (5-7 minutes): | 13 |
| 12.3 | After the Session | 13 |
| 12.4 | Scoring Guidelines | 14 |
| 12.4.1 | SUS Score Interpretation: | 14 |
| 12.4.2 | Task Success Criteria: | 14 |
| 12.4.3 | Issue Severity: | 14 |

1 Testing Session Information

| | |
|--------------------|--|
| Facilitator: | _____ |
| Date: | _____ |
| Participant ID: | _____ |
| Start Time: | _____ |
| Device Used: | <input type="checkbox"/> Laptop <input type="checkbox"/> Tablet <input type="checkbox"/> Desktop <input type="checkbox"/> Other: _____ |
| Browser: | _____ |
| Screen Resolution: | _____ |

2 PART 1: PARTICIPANT INSTRUCTIONS

2.1 Welcome & Introduction

Thank you for participating in our usability testing session. Your feedback will help us improve the Australian Police Drug Testing Dashboard.

2.1.1 What to expect:

- This session will take approximately 20-25 minutes
- You'll be asked to complete specific tasks using the dashboard
- Please think aloud as you work - we want to understand your thought process
- There are no right or wrong answers - we're testing the system, not you
- Your honest feedback is valuable and appreciated

2.1.2 Before we begin:

1. Please set your browser to full screen
2. Clear your browser cache if possible (Ctrl+Shift+Delete on Windows, Cmd+Shift+Delete on Mac)
3. Navigate to: [Dashboard URL will be provided by facilitator]

2.1.3 Important Notes:

- If you get stuck, I may provide minimal assistance after 2 minutes of inactivity
- Feel free to ask questions at any time
- You can stop the session at any point if you feel uncomfortable

3 PART 2: TASK COMPLETION EXERCISES

3.1 Task 1: Basic Navigation & Overview

Time Limit: 2 minutes

3.1.1 Instructions:

“Please explore the dashboard and tell me what this visualization is about. What information can you find here?”

3.1.2 Completion Criteria:

- ☐ Participant understands the dashboard purpose
- ☐ Identifies main data types (drug tests, jurisdictions, time periods)
- ☐ Notes the interactive features available

3.1.3 Facilitator Notes:

Time to complete: _____ minutes

Navigation path followed: _____

Points of confusion: _____

Success level: ☐ Complete ☐ Partial ☐ Failed

3.2 Task 2: Finding Specific Data Points

Time Limit: 3 minutes

3.2.1 Instructions:

“Find out how many positive drug tests were conducted in New South Wales in 2023. What was the most commonly detected substance that year?”

3.2.2 Completion Criteria:

- ☐ Locates NSW data correctly
- ☐ Filters to 2023 data
- ☐ Identifies positive test count
- ☐ Finds most common substance

3.2.3 Facilitator Notes:

Time to complete: _____ minutes

Filters used: _____

Charts accessed: _____

Success level: ☐ Complete ☐ Partial ☐ Failed

3.3 Task 3: Comparing Jurisdictions

Time Limit: 4 minutes

3.3.1 Instructions:

“Compare Victoria and Queensland for the period 2020-2024. Which jurisdiction had higher overall positive test rates? What patterns do you notice?”

3.3.2 Completion Criteria:

- ☐ Sets correct time range (2020-2024)
- ☐ Selects both jurisdictions for comparison
- ☐ Identifies which has higher rates
- ☐ Observes at least one pattern

3.3.3 Facilitator Notes:

Time to complete: _____ minutes

Comparison method used: _____

Patterns identified: _____

Success level: ☐ Complete ☐ Partial ☐ Failed

3.4 Task 4: Using Advanced Filters

Time Limit: 3 minutes

3.4.1 Instructions:

“Show me the age group breakdown for cannabis detections across all jurisdictions in 2022. Which age group had the most positive tests?”

3.4.2 Completion Criteria:

- ☐ Filters by substance (cannabis)
- ☐ Filters by year (2022)
- ☐ Accesses age group data
- ☐ Identifies highest age group

3.4.3 Facilitator Notes:

Time to complete: _____ minutes

Filter sequence: _____

Charts used: _____

Success level: ☐ Complete ☐ Partial ☐ Failed

3.5 Task 5: Geographic Analysis

Time Limit: 3 minutes

3.5.1 Instructions:

“Using the map visualization, identify which state or territory had the highest concentration of positive tests in 2021. What does the map show about regional vs. urban patterns?”

3.5.2 Completion Criteria:

- ☐ Accesses map visualization
- ☐ Filters to 2021 data
- ☐ Identifies highest concentration area
- ☐ Comments on regional/urban patterns

3.5.3 Facilitator Notes:

Time to complete: _____ minutes

Map features used: _____

Regional understanding: _____

Success level: ☐ Complete ☐ Partial ☐ Failed

3.6 Task 6: Export & Data Analysis

Time Limit: 2 minutes

3.6.1 Instructions:

“Export the trend chart showing positive tests over time for all jurisdictions. Save it as an image file.”

3.6.2 Completion Criteria:

- ☐ Locates export functionality
- ☐ Selects appropriate chart
- ☐ Exports successfully
- ☐ Confirms file saved

3.6.3 Facilitator Notes:

Time to complete: _____ minutes

Export format chosen: _____

Any issues encountered: _____

Success level: ☐ Complete ☐ Partial ☐ Failed

4 PART 3: SYSTEM USABILITY SCALE (SUS)

4.0.1 Instructions:

Please rate your agreement with each statement on a scale of 1-5, where:

- 1 = Strongly Disagree
- 2 = Disagree
- 3 = Neutral
- 4 = Agree
- 5 = Strongly Agree

| Statement | 1 | 2 | 3 | 4 | 5 |
|--|--------------------------|--------------------------|--------------------------|--------------------------|--------------------------|
| 1. I think that I would like to use this system frequently. | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| 2. I found the system unnecessarily complex. | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| 3. I thought the system was easy to use. | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| 4. I think that I would need the support of a technical person to use this system. | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| 5. I found the various functions in this system were well integrated. | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| 6. I thought there was too much inconsistency in this system. | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| 7. I would imagine that most people would learn to use this system very quickly. | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| 8. I found the system very cumbersome to use. | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| 9. I felt very confident using the system. | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| 10. I needed to learn a lot of things before I could get going with this system. | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |

4.0.2 SUS Score Calculation:

- For odd-numbered questions: Subtract 1 from the score
- For even-numbered questions: Subtract the score from 5
- Sum all results and multiply by 2.5

Raw Scores: _____

Final SUS Score: _____

5 PART 4: OPEN FEEDBACK QUESTIONS

5.1 Overall Experience

1. What did you like most about the dashboard? _____

2. What did you find most frustrating or difficult? _____

3. Was there anything you expected to find but couldn't locate? _____

5.2 Visual Design & Layout

4. How would you rate the visual clarity of the charts? ☐ Excellent ☐ Good
☐ Average ☐ Poor ☐ Very Poor
Comments: _____
5. Were the colors and labels easy to understand? ☐ Yes, very clear ☐ Mostly clear
☐ Sometimes confusing ☐ Often confusing ☐ Very confusing
Comments: _____

5.3 Navigation & Interaction

6. How intuitive did you find the filtering system? ☐ Very intuitive ☐ Somewhat intuitive
☐ Neutral ☐ Somewhat confusing ☐ Very confusing
Comments: _____
7. Did the tooltips and hover information provide helpful details? ☐ Very helpful
☐ Helpful ☐ Neutral ☐ Not very helpful ☐ Not helpful at all
Comments: _____

5.4 Content & Data

8. Was the level of data detail appropriate for your needs? ☐ Too detailed
☐ About right ☐ Not detailed enough
Comments: _____
9. Did you find the data meaningful and easy to interpret? ☐ Very meaningful
☐ Somewhat meaningful ☐ Neutral ☐ Not very meaningful ☐ Not meaningful
Comments: _____

6 PART 5: SPECIFIC FEATURE FEEDBACK

6.1 Chart Types

Please rate each chart type for usefulness (1=Not useful, 5=Very useful):

| Chart Type | 1 | 2 | 3 | 4 | 5 | Comments |
|--------------------------|--------------------------|--------------------------|--------------------------|--------------------------|--------------------------|----------|
| Line Charts (Trends) | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | |
| Bar Charts (Comparisons) | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | |
| Geographic Map | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | |
| Heatmap | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | |
| Age Group Charts | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | |
| Substance Composition | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | |

6.2 Interactive Features

Please rate the usefulness of these features:

| Feature | 1 | 2 | 3 | 4 | 5 | Comments |
|----------------------|--------------------------|--------------------------|--------------------------|--------------------------|--------------------------|----------|
| Hover Tooltips | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | |
| Click to Filter | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | |
| Year Range Selector | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | |
| Export Functionality | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | |
| Responsive Design | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | |

7 PART 6: TECHNICAL ISSUES & PERFORMANCE

7.1 Performance Issues

Did you experience any of the following problems? (Check all that apply)

- | | |
|---|---|
| <input type="checkbox"/> Slow loading times | <input type="checkbox"/> Mobile/tablet display issues |
| <input type="checkbox"/> Charts not rendering properly | <input type="checkbox"/> Text too small to read |
| <input type="checkbox"/> Filters not responding | <input type="checkbox"/> Colors hard to distinguish |
| <input type="checkbox"/> Browser crashes/freezes | <input type="checkbox"/> Other: _____ |
| <input type="checkbox"/> Export functionality not working | |

Please describe any technical issues in detail: _____

7.2 Browser/Device Compatibility

Device used: ☐ Desktop ☐ Laptop ☐ Tablet ☐ Mobile

Browser: ☐ Chrome ☐ Firefox ☐ Safari ☐ Edge ☐ Other: _____

Screen size: ☐ Large (>1920px) ☐ Medium (1366-1920px) ☐ Small (<1366px)

Any display or responsiveness issues? _____

8 PART 7: TIME TRACKING

8.1 Session Timing

| Activity | Start Time | End Time | Duration |
|---------------------------------|------------|----------|----------|
| Introduction & Instructions | | | |
| Task 1: Basic Navigation | | | |
| Task 2: Finding Data | | | |
| Task 3: Comparing Jurisdictions | | | |
| Task 4: Advanced Filters | | | |
| Task 5: Geographic Analysis | | | |
| Task 6: Export Function | | | |
| SUS Questionnaire | | | |
| Open Feedback | | | |
| Total Session Time | | | |

8.2 Task Success Summary

| Task | Completed | Time | Issues |
|-----------------------------|--|------|--------|
| Task 1 | <input type="checkbox"/> Yes <input type="checkbox"/> No | | |
| Task 2 | <input type="checkbox"/> Yes <input type="checkbox"/> No | | |
| Task 3 | <input type="checkbox"/> Yes <input type="checkbox"/> No | | |
| Task 4 | <input type="checkbox"/> Yes <input type="checkbox"/> No | | |
| Task 5 | <input type="checkbox"/> Yes <input type="checkbox"/> No | | |
| Task 6 | <input type="checkbox"/> Yes <input type="checkbox"/> No | | |
| Overall Success Rate | | | |

9 PART 8: FACILITATOR OBSERVATIONS

9.1 Participant Behavior

General demeanor: ☐ Confident ☐ Hesitant ☐ Frustrated ☐ Engaged ☐ Distracted

Problem-solving approach: ☐ Systematic ☐ Random ☐ Quick to ask for help ☐ Persistent

Notable quotes or comments: _____

9.2 Usability Issues Identified

9.2.1 Critical Issues (blocking task completion):

1. _____

2. _____

9.2.2 Major Issues (significant difficulty):

1. _____

2. _____

9.2.3 Minor Issues (slight inconvenience):

1. _____

2. _____

9.3 Positive Observations

9.3.1 What worked well:

1. _____

2. _____

9.3.2 Unexpected positive discoveries:

1. _____

2. _____

10 PART 9: RECOMMENDATIONS & NEXT STEPS

10.1 Priority Improvements

10.1.1 High Priority (Critical):

1. _____

2. _____

10.1.2 Medium Priority (Important):

1. _____
2. _____

10.1.3 Low Priority (Nice to have):

1. _____
2. _____

10.2 Additional Comments

Participant suggestions for improvement: _____

Facilitator final assessment: _____

11 PART 10: CONCLUSION

11.1 Session Wrap-up

Participant overall satisfaction: ☐ Very Satisfied ☐ Satisfied ☐ Neutral

Would you use this dashboard again? ☐ Definitely ☐ Probably ☐ Maybe

Would you recommend this dashboard to others? ☐ Definitely ☐ Probably ☐ Maybe

11.2 Thank You & Follow-up

Thank you for your valuable feedback! Your input will help us improve the dashboard for all users.

Permission to follow up: ☐ Yes ☐ No

Email for follow-up (optional): _____

Session completed by: _____

Date: _____

12 FACILITATOR GUIDE

12.1 Before the Session

1. Prepare testing environment (clear browser cache, test dashboard functionality)
2. Have consent forms ready
3. Set up recording equipment (if approved)

4. Prepare backup devices/browsers if needed
5. Review participant background information

12.2 During the Session

12.2.1 Introduction (2-3 minutes):

- Welcome and thank participant
- Explain purpose and process
- Emphasize “think aloud” protocol
- Get consent for recording/observation

12.2.2 Task Completion (15-18 minutes):

- Read each task exactly as written
- Don’t lead or hint at solutions
- Note time to complete each task
- Observe navigation patterns and pain points
- Only assist after 2 minutes of struggle

12.2.3 Questionnaires (5-7 minutes):

- Allow participant to complete at their own pace
- Be available for clarification
- Encourage detailed, honest feedback

12.3 After the Session

1. Thank participant for their time
2. Debrief briefly (if appropriate)
3. Complete facilitator notes immediately
4. Organize and analyze results
5. Identify patterns and priority issues

12.4 Scoring Guidelines

12.4.1 SUS Score Interpretation:

- 80-100: Excellent
- 70-79: Good
- 60-69: OK
- 50-59: Poor
- Below 50: Awful

12.4.2 Task Success Criteria:

- Complete: All requirements met without assistance
- Partial: Some requirements met or minimal assistance needed
- Failed: Requirements not met or significant assistance required

12.4.3 Issue Severity:

- Critical: Prevents task completion
- Major: Causes significant difficulty or errors
- Minor: Causes inconvenience or slight confusion

This usability testing package is designed for academic evaluation purposes and follows best practices in user experience research. All responses will be treated confidentially and used solely for improving the dashboard design.