

Advisory Meeting

Drone Technology Program: New Classes, New Opportunities, & Spreading our Wings

2023 Spring

LAS POSITAS COLLEGE

Drone Technology Program

Photography, Mapping, and Piloting



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Program Launch



Brief Introductions!

*How are you currently using drones
in your area of expertise?*

Program Launch



CONTENT

1. Overview of program/courses
2. Successes/Challenges
3. Enrollment/Demographics
4. Proposed Changes

Program Launch



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1. Our inception

What programs could benefit from drones?

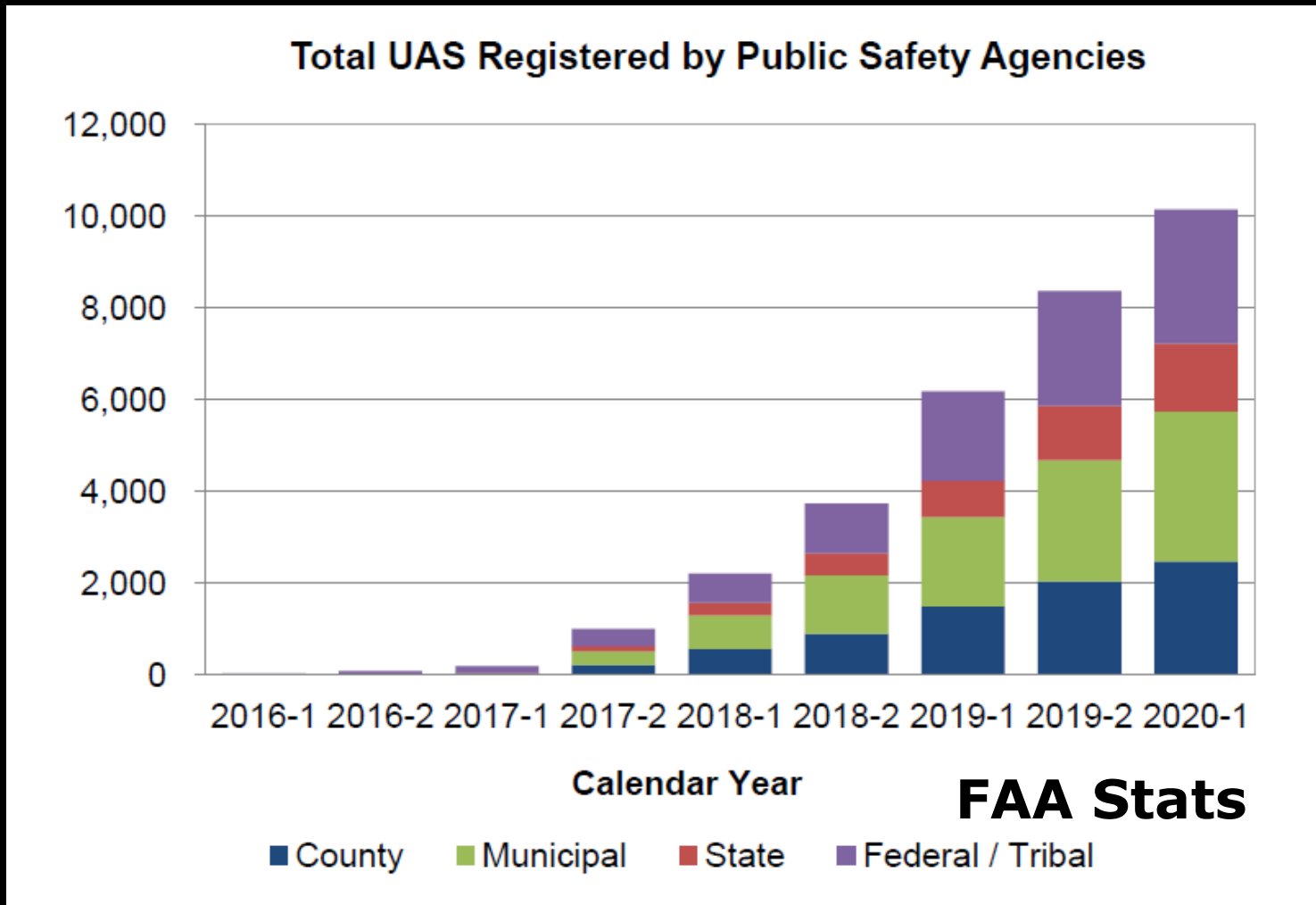
- ***Photography***
- ***Viticulture***
- ***Public safety***



Non-Credit Aviation (NAVI)



1. Our inception – Meet the Need (CTE)



Non-Credit Aviation (NAVI)

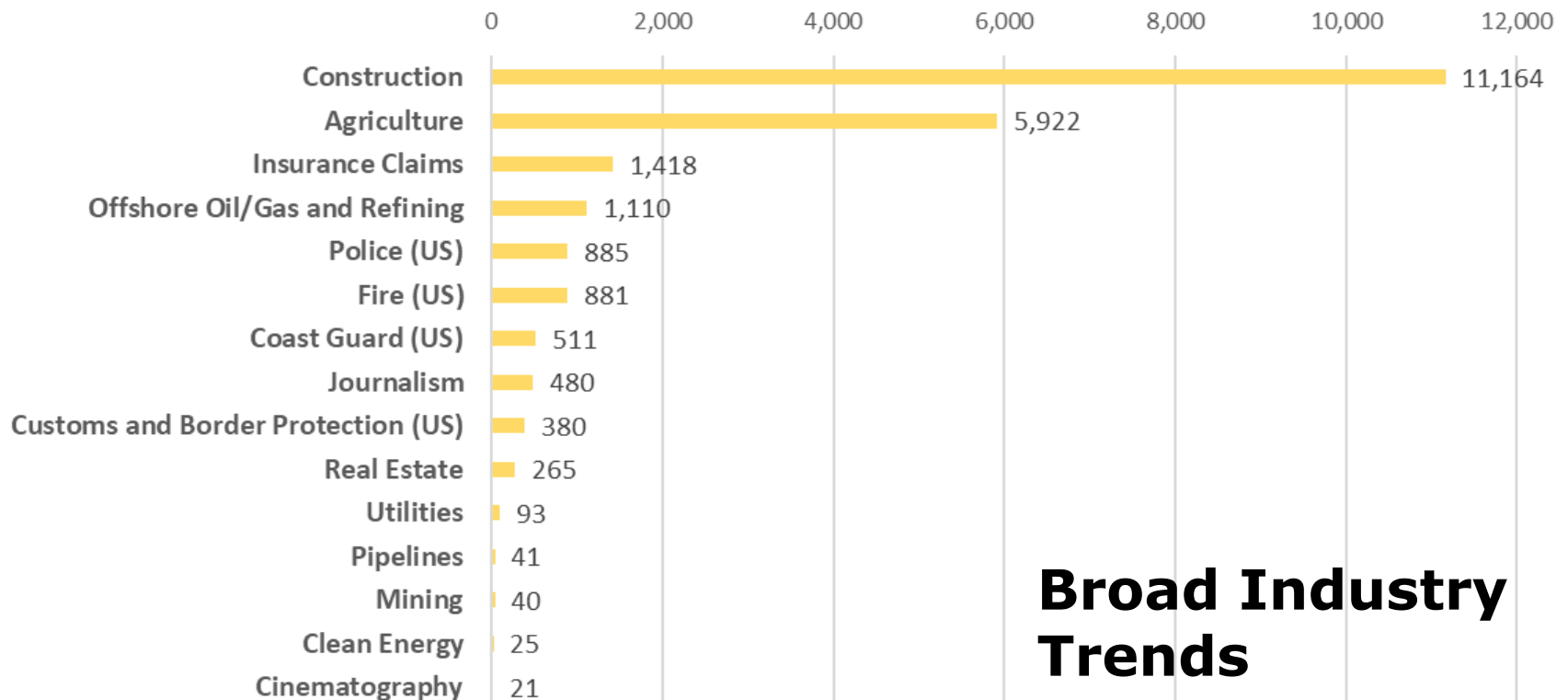


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1. Our inception – Meet the Need (CTE)

Goldman Sachs – InfoGraphic & Research Report (2016)

“Drones: Reporting for Work”





1. Our goals - Vision

- Have a **wide vision** for the program
- **Broad types** of uses for drones
- Integrate with **many programs** at LPC.
- Offer **many choices** for students to suit their interests.

<https://www.laspositascollege.edu/dronetechnology/>

Drone Technology



Las Positas College > Drone Technology

Drone Technology

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[Drone Projects](#)

[Drones & Our Vineyard](#)

[Drone General Info](#)

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Drone Technology Program

Photography, Mapping, and Piloting

Welcome to the exciting drone technology program. Together we will prepare you to plan, fly, and produce professional quality drone images. No prior experience is necessary. This is a hands-on program where you will quickly learn to operate aircraft adeptly within an ethical and safe frame of mind.



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Program Affiliations

- Photography Program
- Viticulture & Winery Technology
- Administration of Justice

Check us out on Instagram!

INSTAGRAM



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1. Perkins Grant Internship

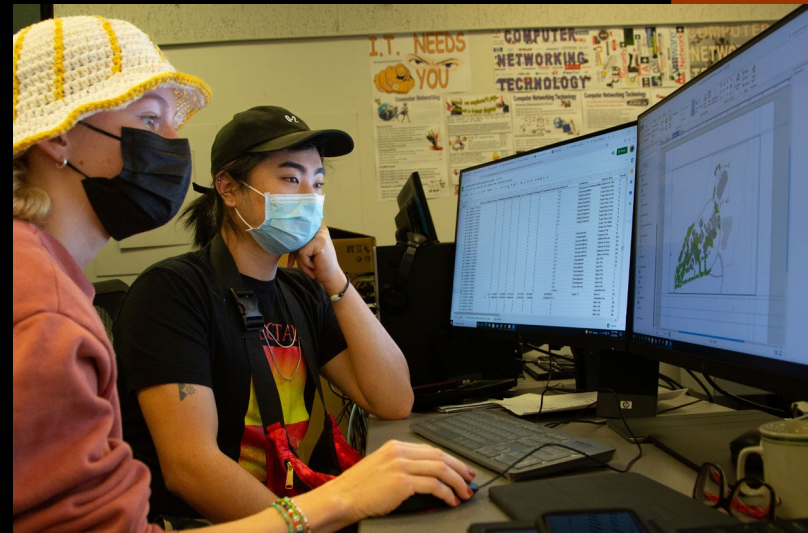
- **4 hours per week**

Ongoing Projects

- Viticulture
- Campus Tree Survey

New Projects

- Solar Array Inspections
- Infrastructure Inspections
- LIDAR
 - 3D modeling
 - 3D mesh volumetric
 - Landscape Maps



Non-Credit Aviation (NAVI)



1. Our Classes

Launch Fall 2022

NAVI 201 Orientation to Drones and (UAS)

NAVI 202 Drone Aerial Survey, Photography and Videography

NAVI 203 FAA Remote Pilot Certificate Exam Preparation

- 4 week Hybrid (online) courses with **Saturday** Hands-on Sessions
- Non-Credit/No Cost/Repeatable

Certificate of Completion (Noncredit)

NAVI DRONE PHOTOGRAPHY, MAPPING, AND PILOTING



NAVI 201 Orientation to Drones and (UAS)

- Skill Based
- Demonstration of wider uses and capabilities

Exercises

1. Introduction Discussion (In-person/Online)
2. FAA Trust Exam and Certification (Online)
- 3. Linear Flying Skills**
- 4. Square**
- 5. Circular**

Non-Credit Aviation (NAVI)



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NAVI 201 Orientation to Drones and (UAS)



Exercises

1. Linear Flying Skills
2. Square
3. Circular

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NAVI 201 Orientation to Drones and (UAS)



Non-Credit Aviation (NAVI)



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NAVI 201 Orientation to Drones and (UAS)

Demonstration of wider uses and capabilities

- Mapping & Intelligent Flight Modes



Non-Credit Aviation (NAVI)



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NAVI 202 Mapping, Photography and Videography

- Project & Exercise Based

Exercises

1. Introduction Discussion (In-person/Online)
2. FAA Trust Exam and Certification (Online)
3. **EXERCISE 1 – Shutterbug: Composition & “Rule of Thirds”**
4. **EXERCISE 2 – Shutterbug: Point of Interest**
5. **EXERCISE 3 – Shutterbug: Pull Away, Pan, and Reveal**
6. **EXERCISE 4 – Mapping: Topographical Survey**



NAVI 203 FAA Pilot Certificate Exam Preparation

Exercises

1. Introduction Discussion (In-person/Online)
2. 4 Weekly Quizzes (12 in total)
3. Final Exam

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Successes & Challenges



Non-Credit Aviation (NAVI)



2. Successes/Challenges

NAVI 201 Orientation to Drones and (UAS)

1. Quick transition to hands on work
2. Develop skills quickly
3. Wide Range of Abilities
4. Difficult to keep students on task
5. Become overconfident
6. Not filling out forms and timing



Non-Credit Aviation (NAVI)



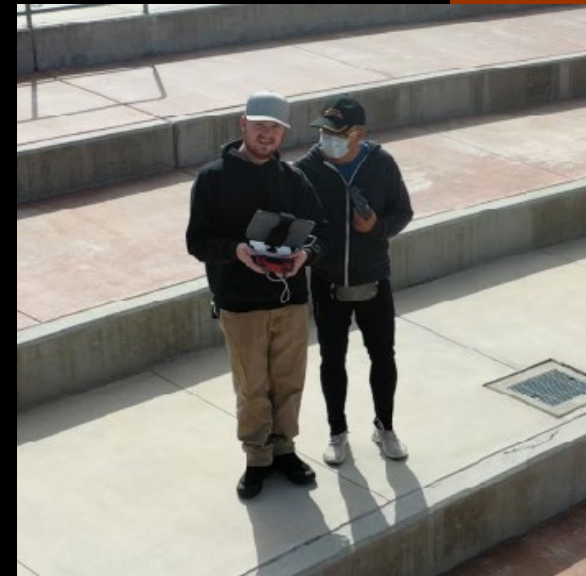
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2. Successes/Challenges

NAVI 202 Mapping, Photography and Videography

FALL

1. Open Project Based (Photo/Mapping)
2. Group 2-3
3. Wide range of creative results
4. Ambitious project
5. Overconfident
6. Not filling out forms/FAA Rules



Non-Credit Aviation (NAVI)



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2. Successes/Challenges

NAVI 202 Mapping, Photography and Videography

SPRING

1. Exercise Based (Photo/Mapping)
2. Change Location outside
3. More Focused Tasks?



Non-Credit Aviation (NAVI)



2. Successes/Challenges

NAVI 203 FAA Remote Pilot Certificate Exam

FALL

1. Online
2. Lecture/Quiz Base
3. Canvas Interface is unfamiliar
4. Low completion Rate
5. Easy for students to fall behind

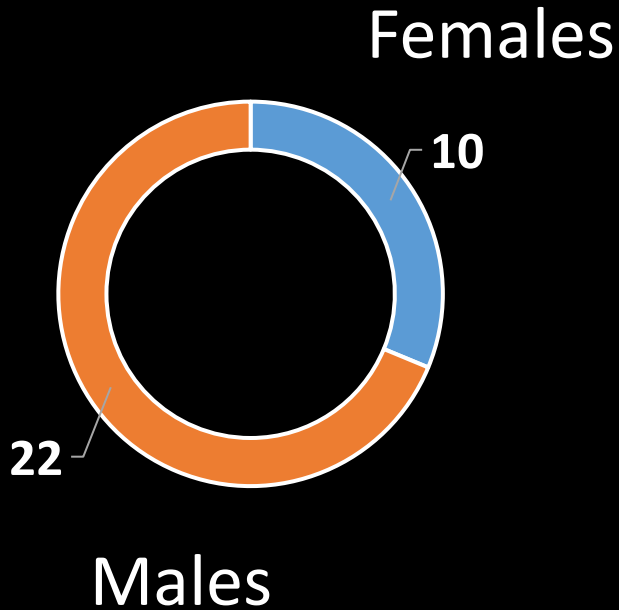


Non-Credit Aviation (NAVI)

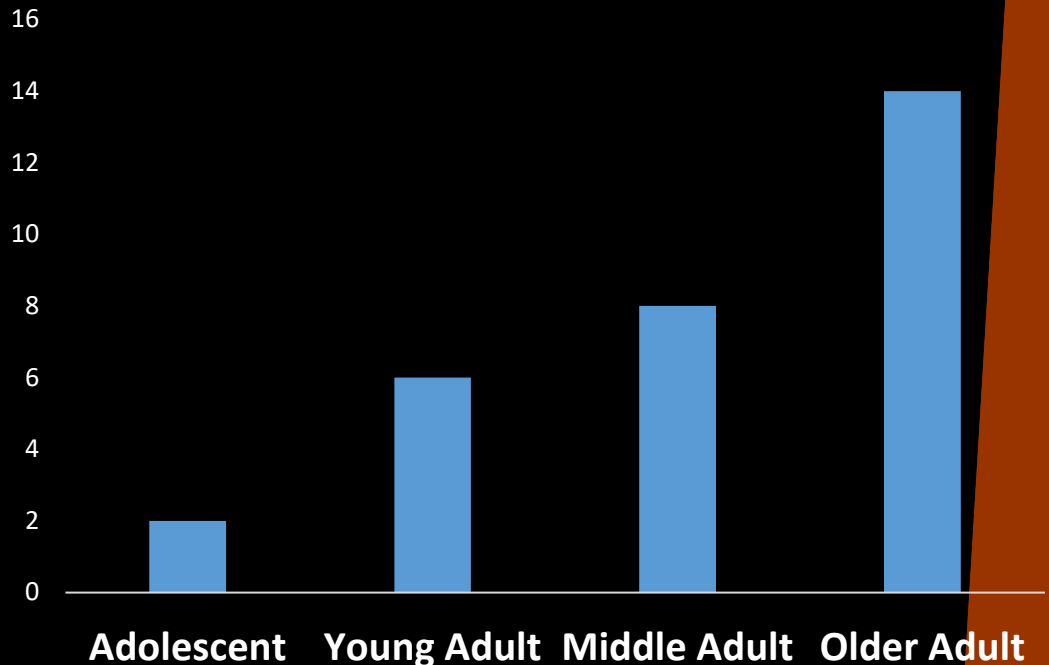


3. Demographics

NAVI 201 Orientation to Drones and (UAS)



84% Pass



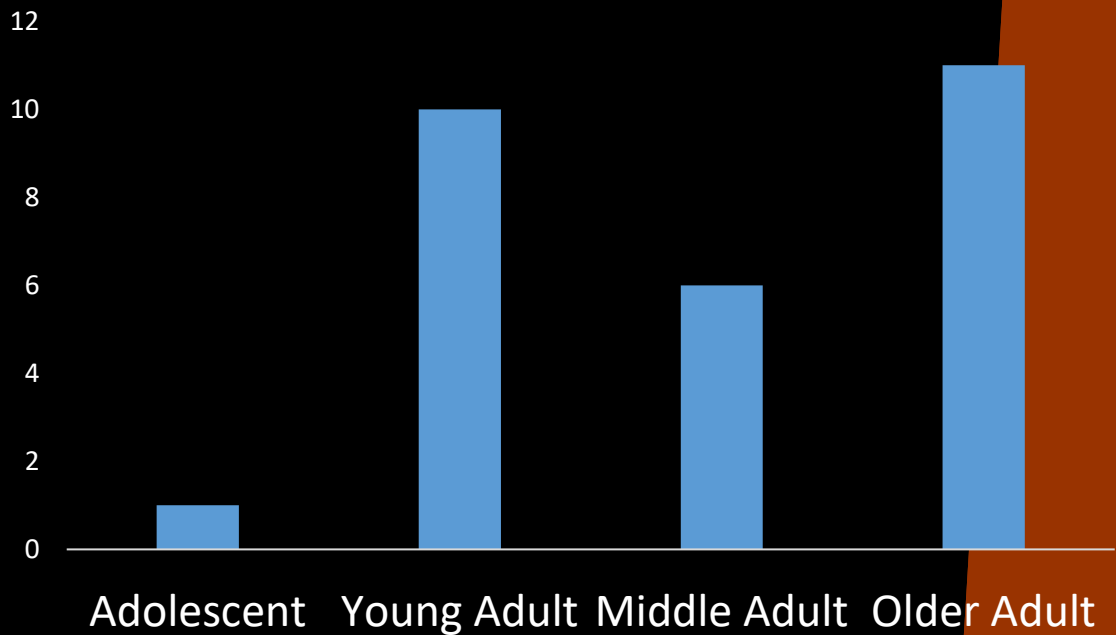
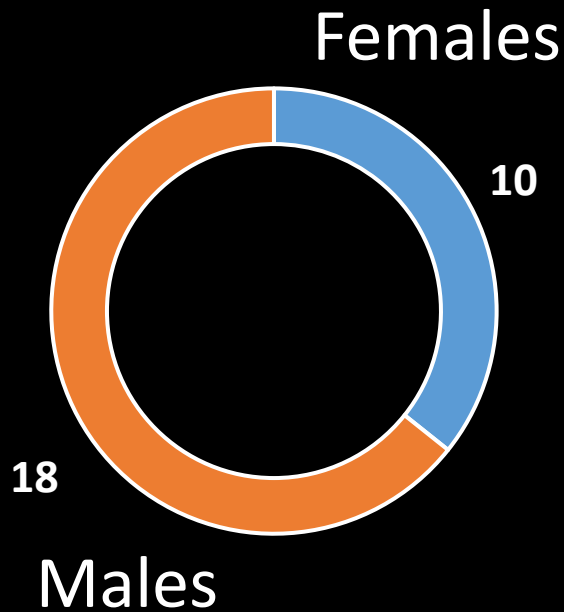
Non-Credit Aviation (NAVI)



3. Demographics

NAVI 202 Mapping, Photography and Videography

98% Pass

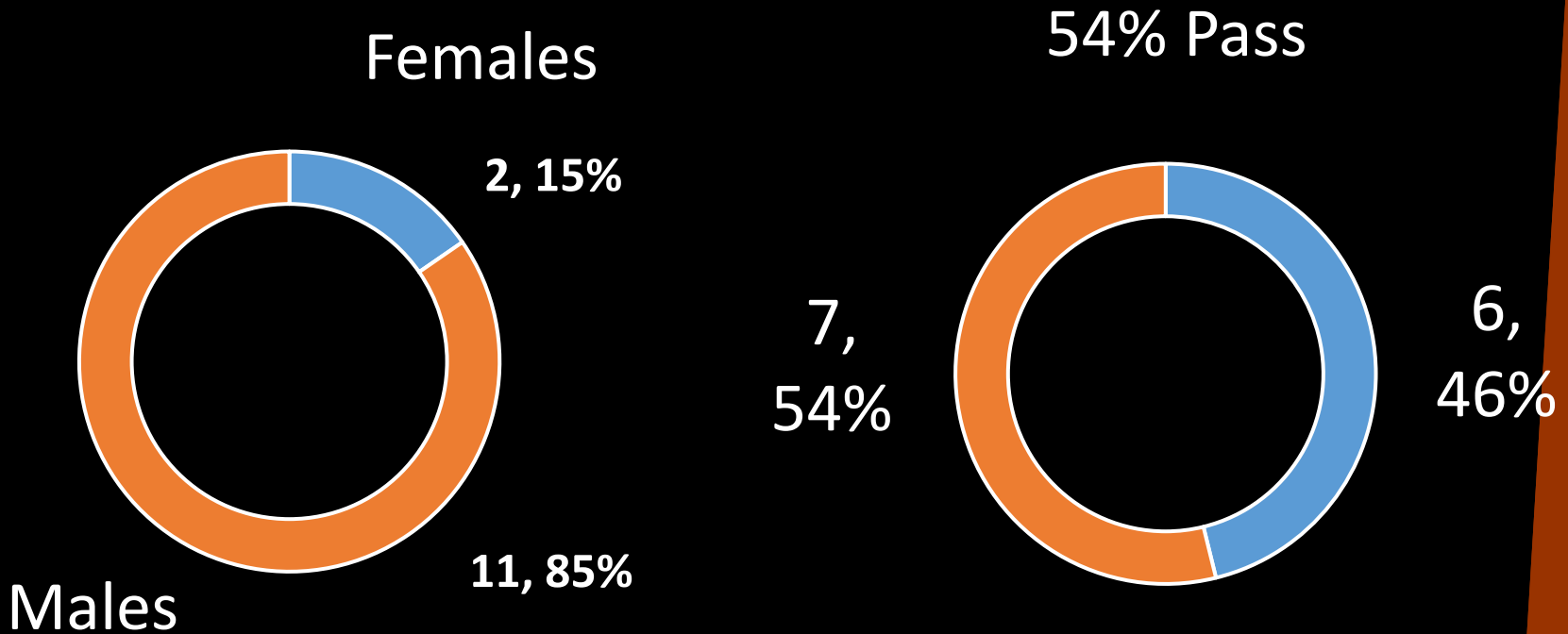


Non-Credit Aviation (NAVI)



3. Demographics

NAVI 203 FAA Remote Pilot Certificate Exam





4. Our Future

Additional Classes?

8 or 16 Week Semester courses (Credit) 1 – 3 units

- Mapping Specific
- Videography/Photography

Short Training Courses

- Industry Specific
- NIST (National Institute of Standards and Technology)
 - Skills Training
- Programming & Fabrication
- Maintenance & Repair



4. Next Steps

Q & A

1. Feedback about our Program?
2. What courses or training should we consider?
3. What skills should we focus on?
4. Where do you see the future of drones?

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Thank You All

