WASTE MANAGEMENT ROUNDTABLE
TAMPA, FL

Chair – Rob Freeman LAWA

Co-Chair - Jennifer Acton SFO

ACI NORTH AMERICA

AIRPORTS COUNCIL INTERNATIONAL

WASTE MANAGEMENT ROUNDTABLE AGENDA

1. **Introduction (5 mins)**

   Introduction to working groups airport waste management.

2. **Introduction to TPA Recycling and Waste Management Efforts (20 mins)**

   Justin Smith – Project Director / Airport Architect /Sustainability Manager

   Paul Ridgeway – Director of Maintenance

   a. Highlights to TPA's recycling and waste management program
   b. Lessons Learned and challenges to TPA's program and initiatives
   c. Q & A

3. **Industry Project – Let's Talk Dirty: Cleaning Up Capital Waste Management (20 mins)**

   Tiffany Jones - Haley & Aldrich

   a. Defining the problem and identifying desirable outcomes
   b. Recognizing barriers to progress
   c. Solving for opportunity and a sustainable future
   d. Q & A

4. **Roundtable discussion & call for topics for quarterly call (15 mins)**

   Attendees discuss potential issues for next quarterly Working Group call.

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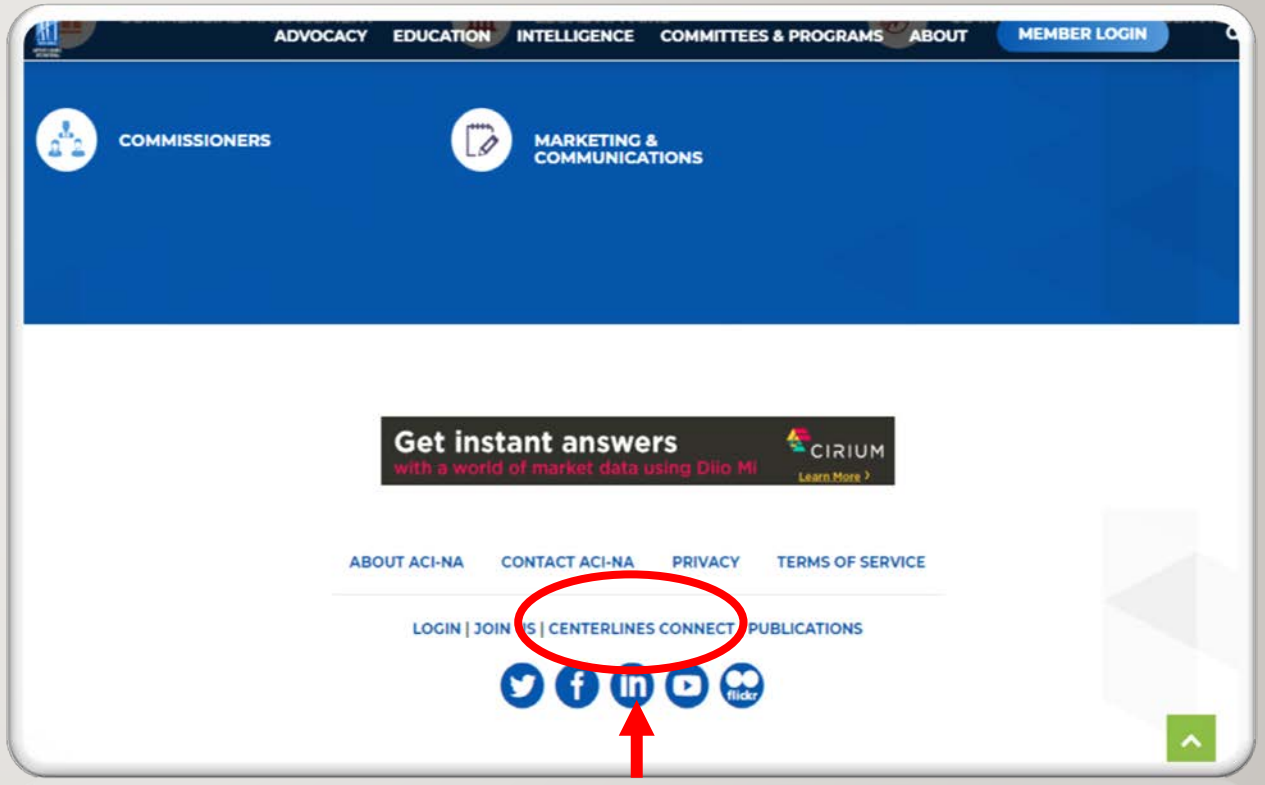
Navigating Through Waste Management: Centerlines Connect – Cloud share

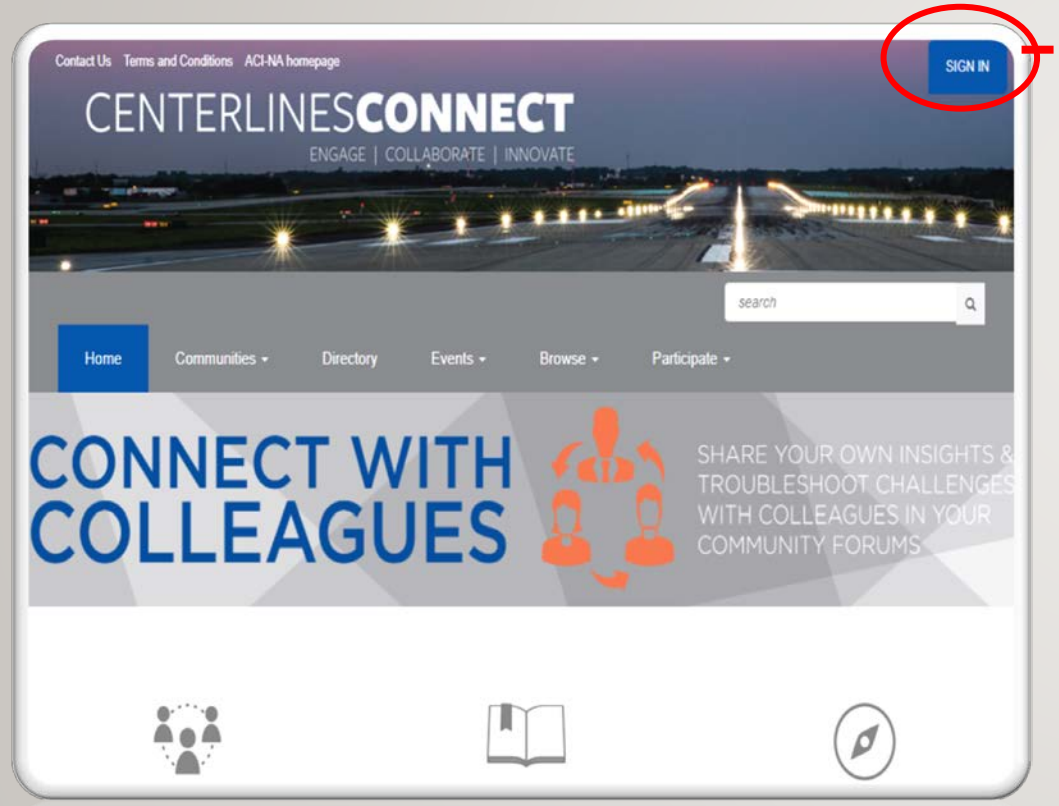
STEP 1:

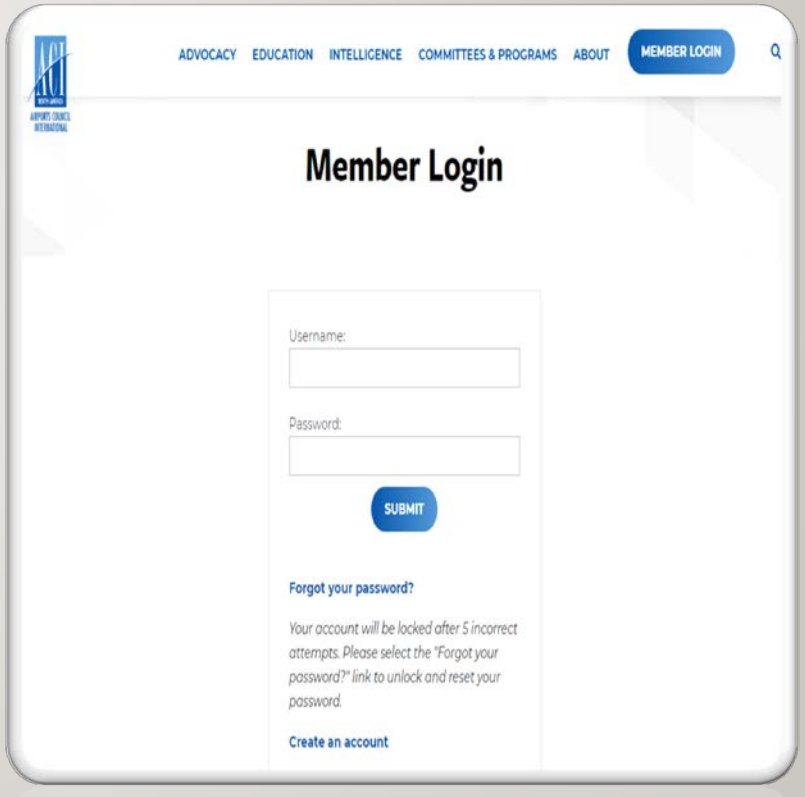
Scroll to the very bottom of the ACI airportcouncil.org home page and click "Center Lines Connect"



STEP 2:

Once you've clicked "Centerlines Connect," Click the sign in button on the top right corner of the page and log In

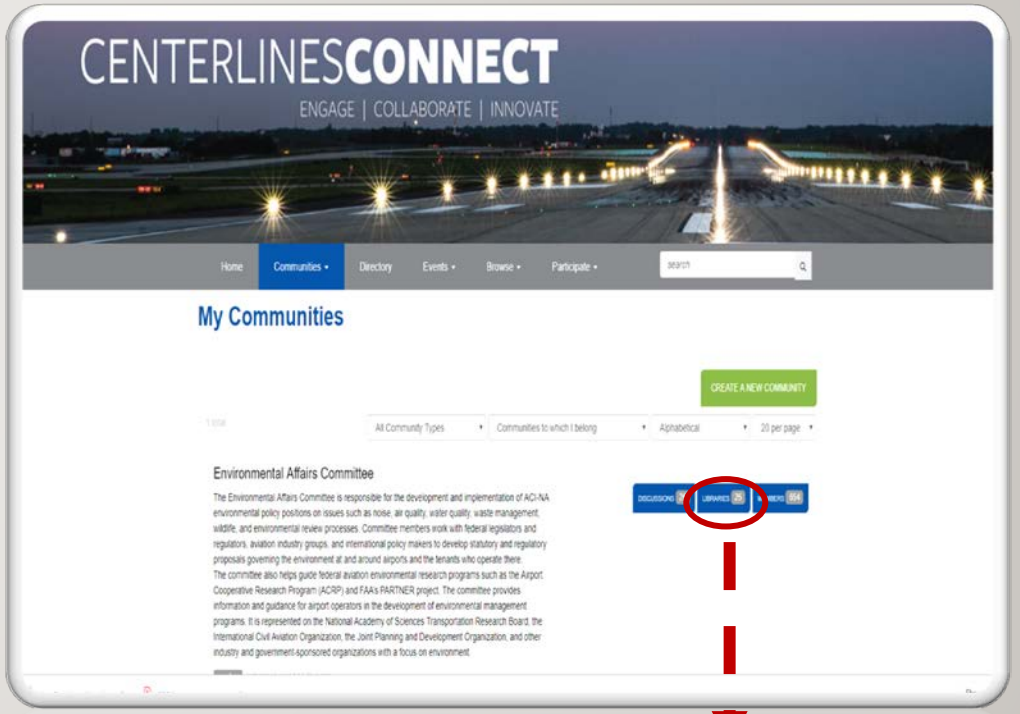




STEP:3

Once you've been logged in, Click "Communities" & Scroll down to "My Communities"

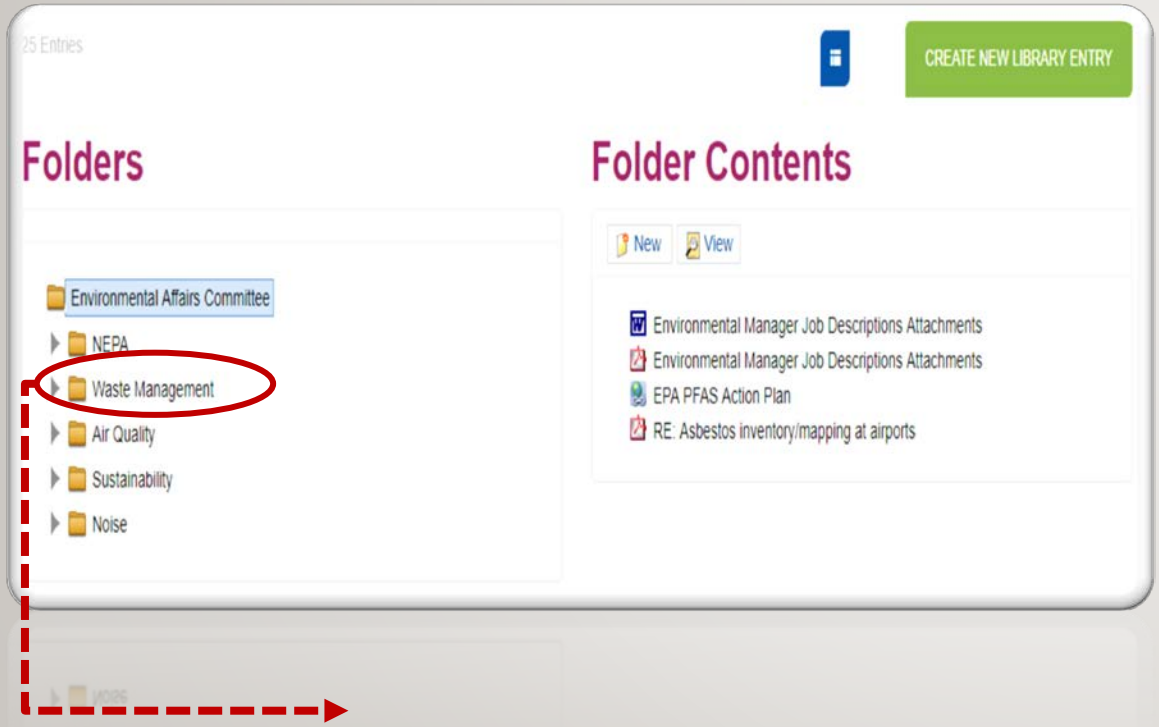
Afterwards then click "Libraries"

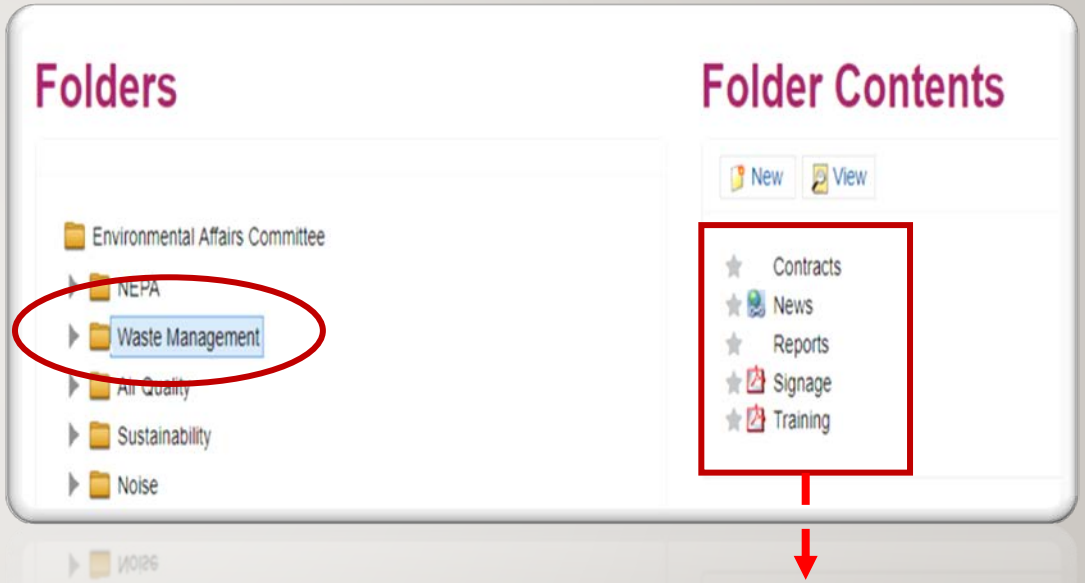


STEP 4:

Need waste management resource information / signage / contract language /etc?

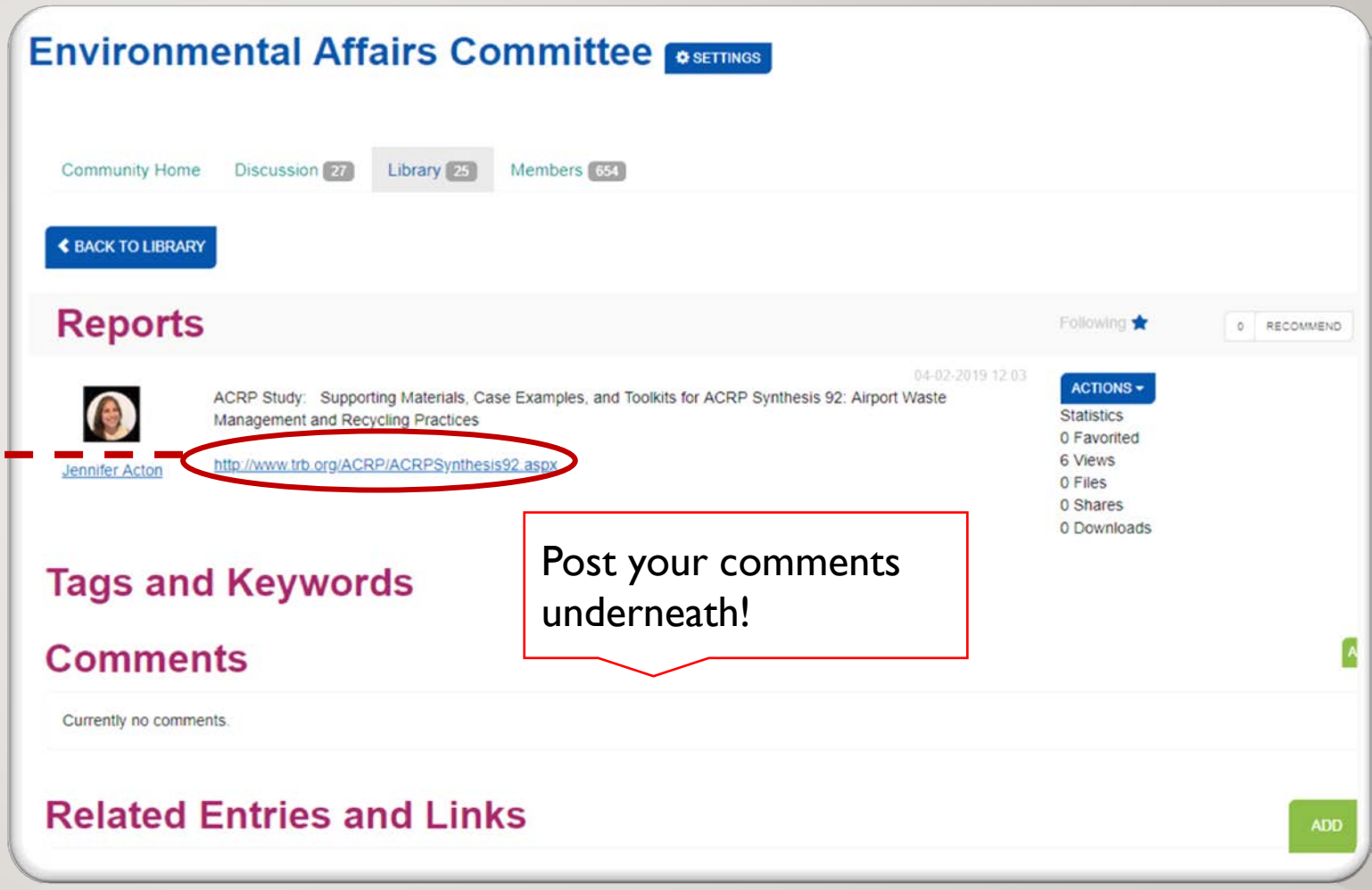
Select the Waste Management Folder & It will navigate you towards the desired folder contents





STEP 5:

By clicking through the folder contents, you can learn more information and follow suggested links, and or PDF's.



STEP 6:

Press the download button & you can view and keep this resource for yourself!

Questions on Navigating through Centerlines Connect- Waste Management –Cloud Share

Contact Jennifer Acton, Jennifer.acton@flysfo.com or 650-821-8380

Recycling & Waste Management Efforts

Waste Management Working Group Meeting

ACI-NA 2019 Annual Conference

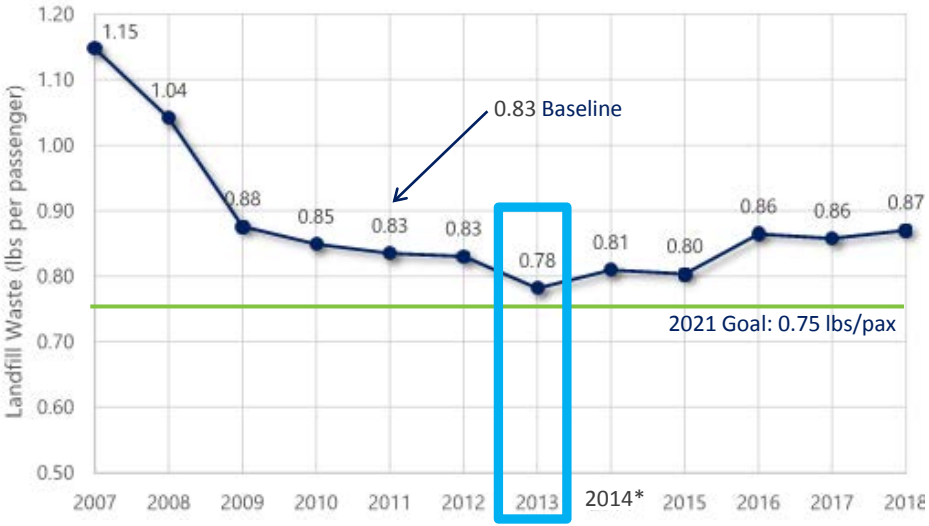
Tampa International Airport

Hillsborough County Aviation Authority

Tampa International, Peter O. Knight,
Plant City and Tampa Executive Airports

TPA Solid Waste & Recycling Metrics

Annual Solid Waste Disposal (lbs/pax), 2007-2018



*Master Plan – Phase 1
*Concessions Redevelopment

Annual Recycling Rates (%), 2007-2018

*Master Plan – Phase 1
*Concessions Redevelopment

Lets Talk Dirty:
Cleaning Up Capital Waste Management

Tiffany Jones

HALEY ALDRICH

Contents: What are we going to talk about

1. Introductions
2. Defining the problem and why it is important
3. Identify the desirable and non-desirable outcomes
4. Recognize barriers to progress
5. Solving for opportunity and a sustainable future

Introductions: The company

- Based out of New England
- 27 offices, over 700 employees
- Over 60 years' experience
- Serve the built environment life cycle:
  - Environment
  - Sustainability and Resilience
  - Government infrastructure

Introductions: Tiffany N. Jones

- Over 15 years experience with large scale project and capital programs
- 13 years of aviation and sustainability experience
- LEED AP BD+C
- Certified true waste advisor
- Active advocate of sustainability serving on various boards of sustainable interest

HALEY ALDRICH

Introductions: Home capital waste management

- $ = pop quiz with prize
- If you see something you would like or learned and want to share, take a picture and tweet it with #Airports19.
- The best tweet will be chosen for a prize.

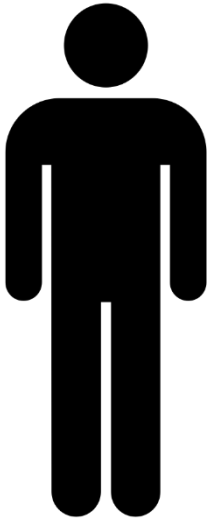
Defining the problem and understanding why it is important

- Defining the problem:

  "Current waste management strategies do not facilitate a significant reduction of waste to landfill and exports from airport operations"

- Boundaries
  - Operational waste only
    - Will be produced on an ongoing basis
- Outside the Boundaries
  - Construction waste
  - Hazardous waste
  - International waste designated for incineration

Defining the problem and understanding why it is important



4.6 lbs. of waste per person per day

X

1.73 million domestic passengers per day

=

<u>up to 7.95 million lbs. of waste per day traveling through domestic airports</u>

Defining the problem and understanding why it is important

- **Concerns with traditional means of waste management**
  - **Exporting**
    - International countries are restricting imports of recyclable and non- recyclable waste
      - January 2018 China restrictions
      - 5% to now 2.5 % contamination acceptance rate
    - India looking into restricting waste imports
  - **Landfills**
    - Take up real estate for agriculture
    - Toxins – irreversible soil contamination
    - Greenhouse gasses

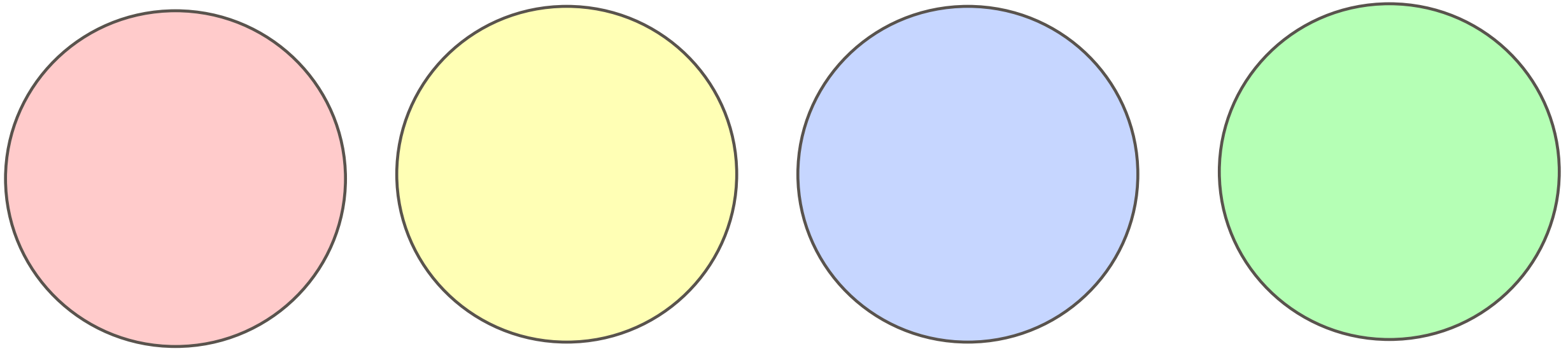
Identifying desirable and non desirable outcomes

- **Desirable outcomes**
  1. Reduction in harvesting of raw materials
  2. Contribute less to landfills
  3. Integrate with the local community for circular economy

- **Non Desirable outcomes**
  1. Increased landfill use
  2. Illegal dumping
  3. Exporting to other countries
  4. Waste to energy (non-closed system)

Recognize barriers to progress

- Identify key stakeholder, their integration to airports operations, understanding their limitations and the inputs and outputs of their operations.



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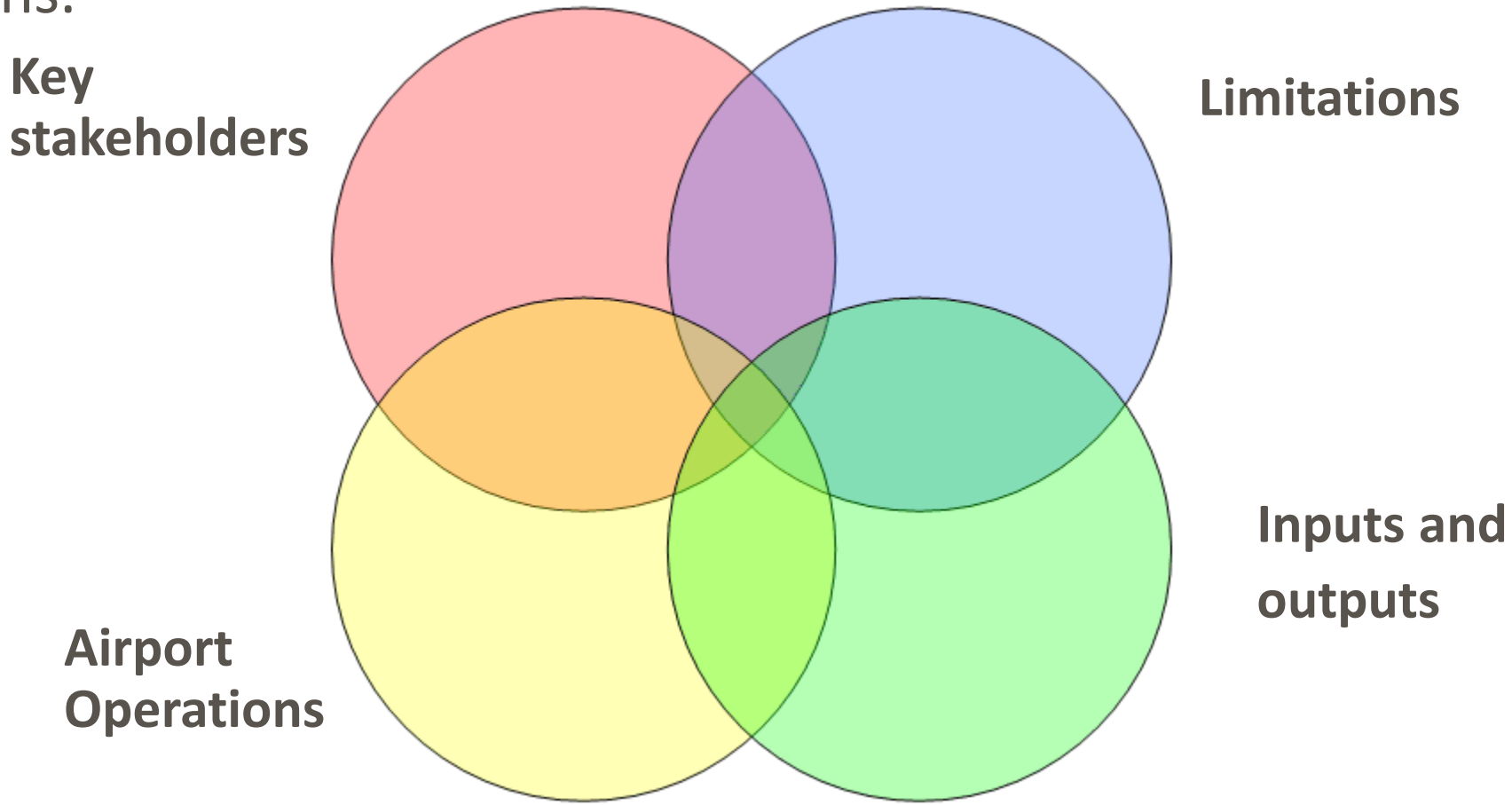

HALEY ALDRICH

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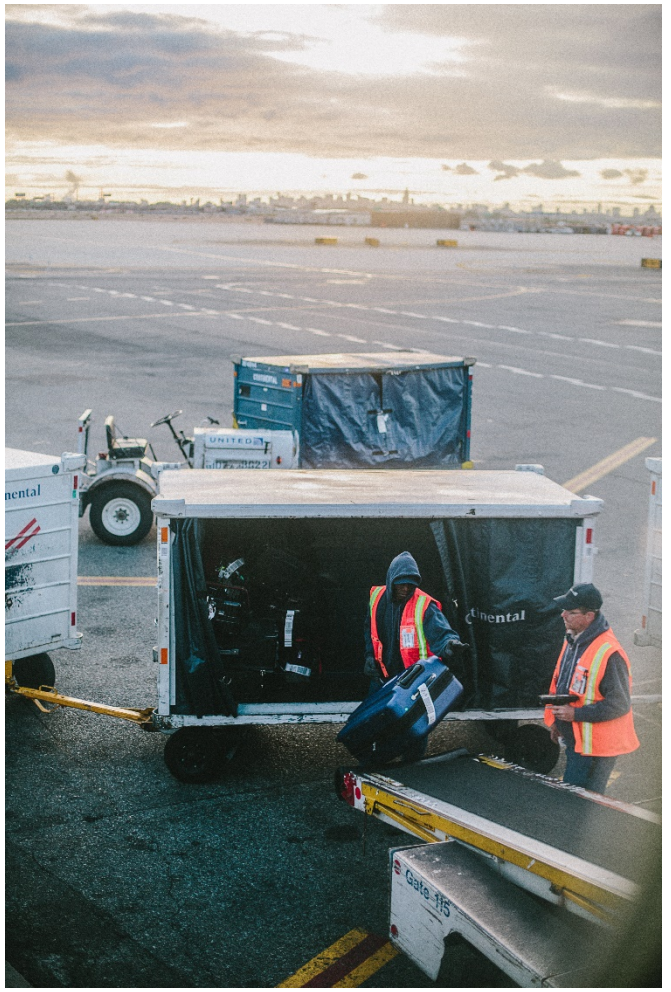

Key Stakeholders

1. Airlines
2. Tenants
3. Passengers
4. Government agencies
5. Service providers
6. Airport operators

Recognize barriers to progress

- Identify key stakeholder, their integration to **airports operations**, understanding their limitations and the inputs and outputs of their operations.

Airport Operations

1. Cargo
2. Maintenance
3. Aircraft operations
4. Passenger logistics
5. Service providers
6. Safety (ARFF)

Recognize barriers to progress

- Identify key stakeholder, their integration to airports operations, understanding their **limitations** and the inputs and outputs of their operations.

Limitations

1. Operations only at a certain time and location
2. Restricted areas
3. Operations take place in an area that is owned by one party and operated by another.
4. Competing interest
5. Qualified labor
6. Conflicting B2B polices and operations
7. No policies addressing key concerns or issues
8. Geography

Recognize barriers to progress

- Identify key stakeholder, their integration to airports operations, understanding their limitations and the **inputs and outputs** of their operations.

Inputs and outputs

1. Organics
2. Plastics
3. Metals
4. Wood

Solve for opportunity and a sustainable future

- Define your goal:

"Reduce waste to landfill and exports produced from airport operations"

- Actions to obtain the desirable outcomes:
  - Increase diversion of waste to landfill
  - Zero waste purchasing
    - Reduction in harvesting of raw materials
  - Contribution to a circular economy
    - Identify partnerships that could benefit from the outputs of your operations
    - Identify materials that could stay in the cycle of operations
    - Eliminate or severely reduce single use articles

Solve for opportunity and a sustainable future

- Take a phased execution
  - Redesign the approach
    - Address the current concerns and prepare for the new operations
    - Ask “is this item/ process necessary?”
    - Investigate supply chain management alternatives
  - Policies implementation strategies and tools for success
    - Recognize gaps in current infrastructure and the execution of the policies intent.
    - Make sure the right people are at the table when discussing variances from the norms as it relates to operations.
    - Leave room for incentives

Solve for opportunity and a sustainable future

- Offer tools for convergence (identify milestones)
  - SMART goal setting
    1. Specific
    2. Measurable
    3. Attainable
    4. Relevant
    5. Time-based

Solve for opportunity and a sustainable future

- Identify areas of highest influence
  - Airports operations
    - Maintenance
    - Aircraft enplanement area
    - Passenger logistics
    - Policies for tenants
    - Service providers
  - Meet with key stakeholders
    - Airlines
    - Governing agencies
    - Passengers
    - ?

Solve for opportunity and a sustainable future

- Identify areas of highest influence
  - Meet with key stakeholders
    - Airlines
    - Governing agencies
    - Passengers
    - Outside local 3rd parties
      - Coca – Cola Company
        - 2018 Coca-Cola set 2030 goal to collect and recycle the equivalent of every bottle or can it sells
      - Goodr program
        - Delivery of food surplus to local communities

Conclusion: What we learned

1. Defining the problem and why it is important
2. Identify the desirable outcomes
3. Recognize barriers to progress
4. Solving for opportunity and a sustainable future

Thank you

Lets Talk Dirty:
Cleaning Up Capital Waste Management

Tiffany Jones

Mobile: 404-545-2505

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