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ASPEN/PITKIN COUNTY AIRPORT

# Airport Advisory Groups

***Reporting to the Airport Vision Committee***

*December 5, 2019*

# Tonight's Agenda

- Welcome, Opening Remarks
- Order of Reporting Out:
    1. Focus Group
    2. Airport Experience Working Group
    3. Technical Working Group
- Next Steps with the Airport Vision Committee



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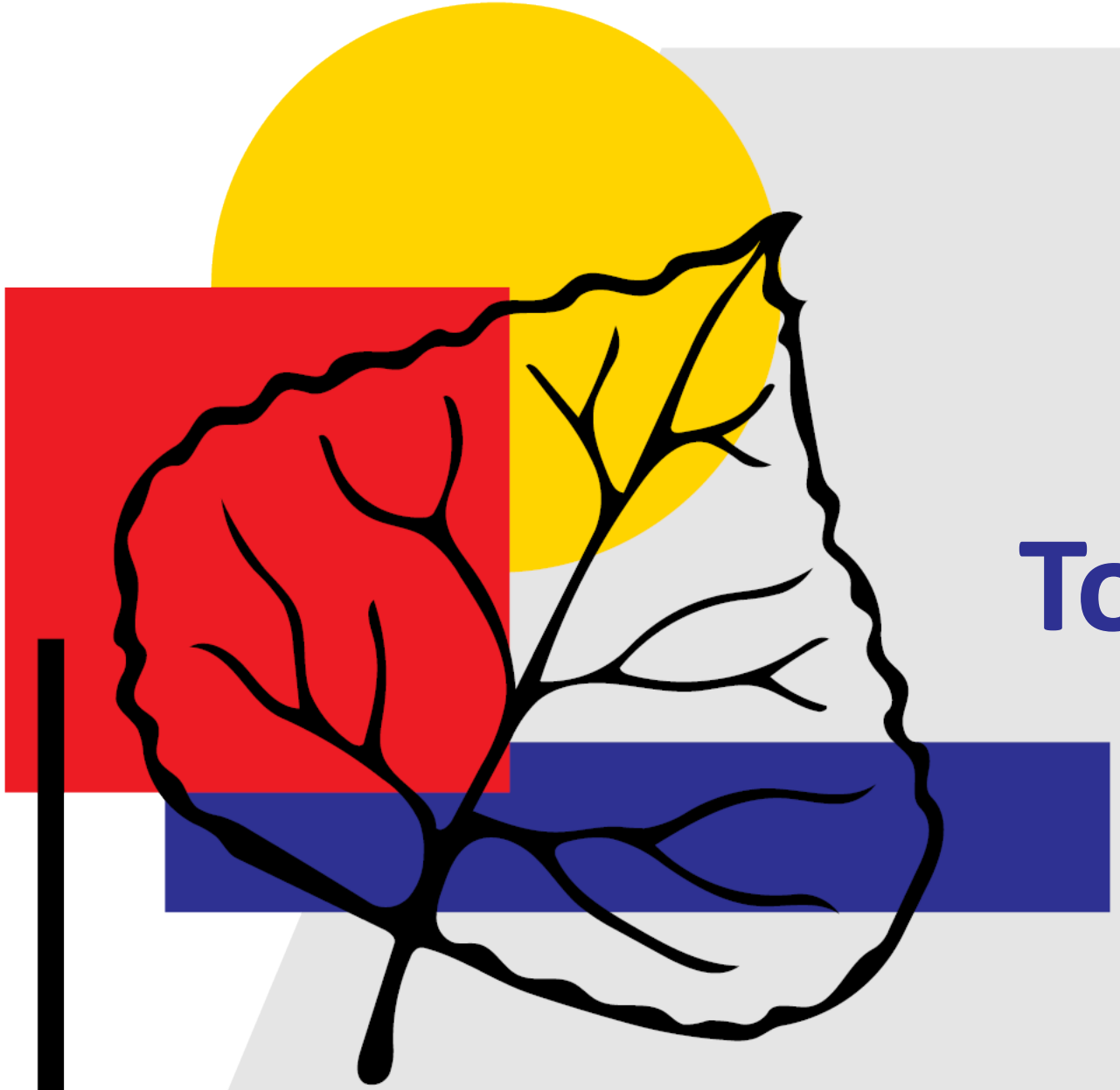
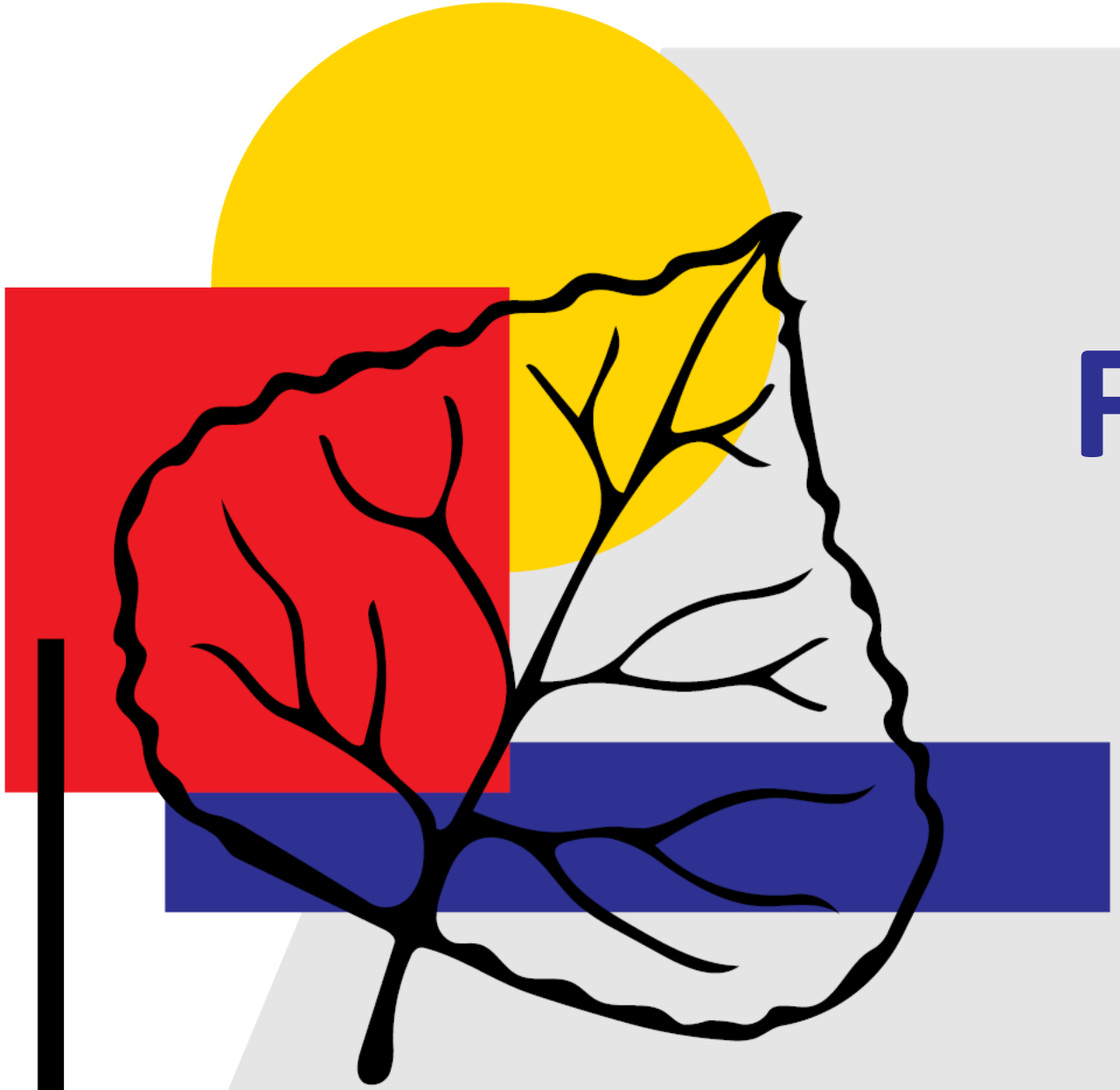


# Tonight's Format

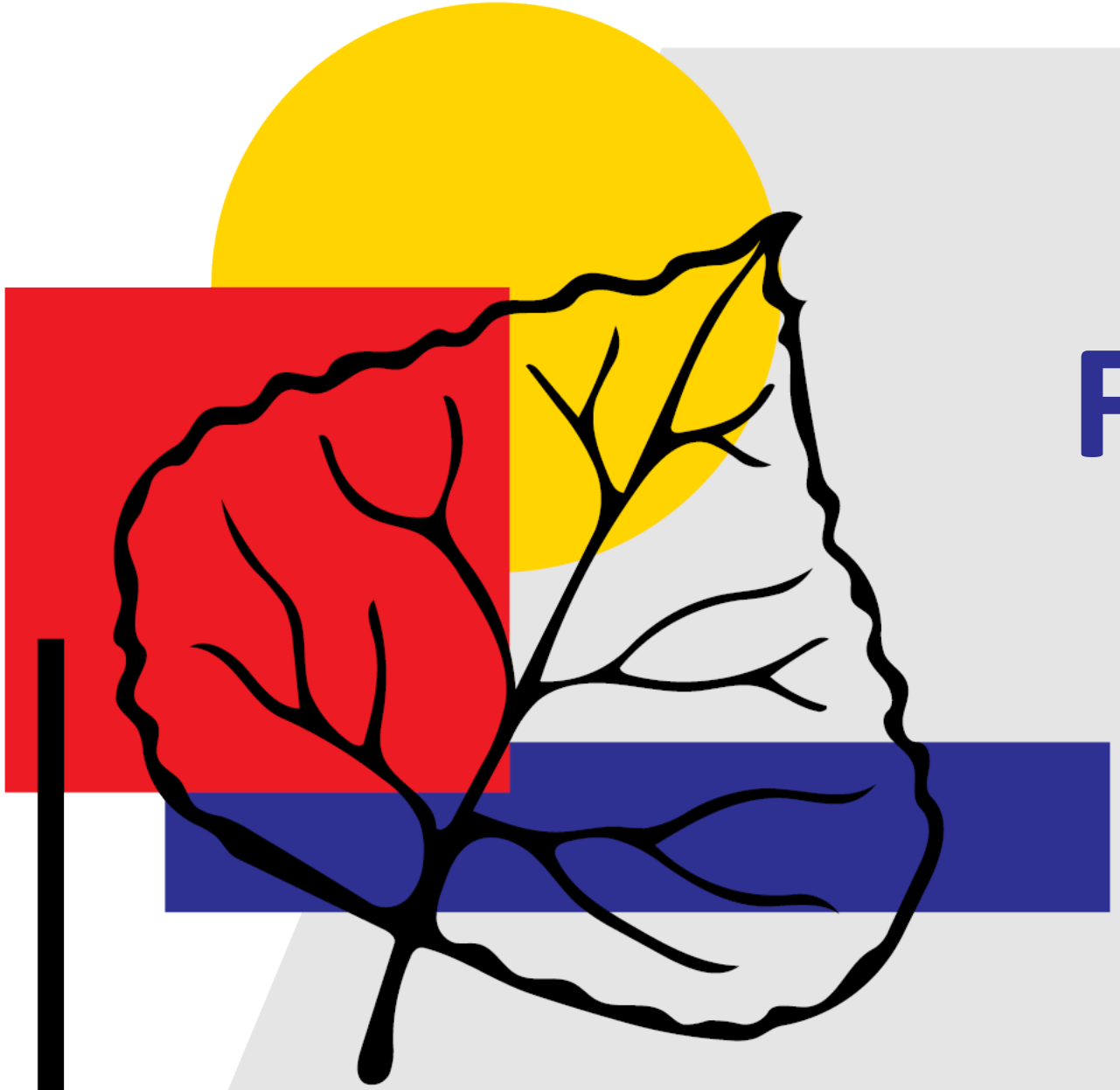
# Advisory Group Members will Present to the Airport Vision Committee

- County Facilitators will set the context
- Minority Reports will go first
- Majority Reports next
  - Focus Group
  - Airport Experience Working Group
  - Technical Working Group
- AVC has an opportunity to ask clarifying questions

# Focus Group- Airport Connectivity/ Mobility



# Focus Group Minority Report



# Focus Group Majority Report

# Our Assignment:

## How can we improve airport connectivity?

- What would more convenient and easy ground transportation to and from the airport look like?
- How can we enhance multi-modal transportation options and create seamless connectivity to transit?
- How does the Airport fit into the broader surface transportation network of Aspen, Snowmass Village, Pitkin County and the Roaring Fork Valley?

# Our Guardrails:

**What's *not* our mission?**

- Not to try to solve the Entrance to Aspen or the light rail debates.
- Not to recommend improvements that fall outside the EA (Environmental Assessment) clearance.

**What *is* our mission? Visioning, not designing.**

- How can we improvement airport connectivity?

# The Work of Our Predecessors:

Some examples:

2017 Upper Valley Mobility Report by Community Forum Task Force on Transportation and Mobility, Aspen Institute Community Program

2017 Upper Valley Mobility Study proposed by Parsons

2014 Surface Transportation Best Practices Study, Aspen/Pitkin County Airport, Felsburg Holt & Ullevig

2013 The West of Maroon Creek Master Plan, Pitkin County, Adopted October 8, 2013

2012 Aspen Area Community Plan, City of Aspen and Pitkin County

## General Congruence with Community Character Working Group recommendations on:

- Increasing public transport
- Providing adequate parking
- Reducing overall vehicle trips
- Improving signage and wayfinding
- Improving luggage transport and delivery;
- Improving the airport/82 interface
- Partnering with EOTC and RFTA

# How can we improve airport connectivity?

## Introduction

- No **substantial revision, editing or consolidation** in comments.
- **Redundancy, diversity of opinion and variation in writing** reflects the importance members attached to the questions.
- **Comments on issues considered important** not easily catalogued are presented as “additional comments.”
- Comments **reflect a wide variety of opinions** that are worthy of the county commissioners’ consideration.

**First Question:** What would more convenient and easy ground transportation to and from the airport look like?

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First Question:  What would more convenient and easy ground transportation to and from the airport look like?

## Summary Response:

- A **mix of public and private modes of transportation to include:**
  - Greater utilization of RFTA buses, light rail, monorail, gondola.
- A new **multimodal transportation facility** located primarily within the existing airport property perimeter, the new terminal and Highway 82.
- A **coordinated balance of weather-protected facilities** for parking, car rental, shuttle, taxi and private drop-off and pick-up.
- **Coordinated management of traffic** through the facility to maximize traveler convenience while minimizing energy consumption.

First Question:  What would more convenient and easy ground transportation to and from the airport look like?

# Detailed Responses Examples:

## PUBLIC TRANSPORTATION

- Easy walking access from buses to the terminal.
- Provide public busses that loop through the airport.
- Long term parking somewhere along the BRT route may encourage more locals to use it.

. . .

First Question:  What would more convenient and easy ground transportation to and from the airport look like?

## Additional Detailed Response Subjects:

- **LUGGAGE:** Movement of luggage directly from planes to traveler destinations.
- **RENTAL CARS:** All-electric fleet; Move rentals to the Intercept lot.
- **PARKING:** Create ample but TEMPORARY surface-only parking areas close to the terminal; Create an ASE-designated structured parking facility at the Intercept Lot
- **SIGNAGE/GUIDANCE:** Clear, understandable signage is needed to direct people to where they want to go.
- General

**Second Question:** How can we enhance multi-modal transportation options and create seamless connectivity to transit?



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Second Question:  How can we enhance multi-modal transportation options and create seamless connectivity to transit?

**Summary Response:**

- Facilitate the future development of a terminal with an **integrated, multi-modal transportation and vehicular circulation facility**.
- **Hire the appropriate design/engineering and funding consultants with demonstrated experience and expertise** in multimodal airport ground transport projects.

Second Question:  How can we enhance multi-modal transportation options and create seamless connectivity to transit?

## Detailed Response Examples:

- **Provide for taxi/shuttle marshals** at curbside to assist arriving passengers to find their ride and to communicate by radio or cell phone with off-site taxi/shuttle queues and operators.
- **Straight-through islands** like those at DIA to address weather issues.

**Third Question:** How does the Airport fit into the broader surface transportation network of Aspen, Snowmass Village, Pitkin County and the Roaring Fork Valley?



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Third Question: How does the Airport fit into the broader surface transportation network of Aspen, Snowmass Village, Pitkin County and the Roaring Fork Valley?

## Summary Response:

- The Airport should be an **integral part of the upper Roaring Fork Valley transportation network**.
- Its **efficient, safe and environmentally-friendly operation** is essential to the economic vitality of the community.
- **Increasing public transport** to and from the airport while minimizing disruption with existing forms of transport or increasing transportation inefficiencies will be challenging but worth the effort.

Third Question:  How does the Airport fit into the broader surface transportation network of Aspen, Snowmass Village, Pitkin County and the Roaring Fork Valley?

## Detailed Response Examples:

- The airport should **act as one of the hubs of our regional transportation network**.
- The dedicated Hwy 82 transit corridor/right of way and easements need to be preserved and maintained to accommodate future use of light rail or other local transit modes that we may not yet know of today. **“Future-proof” the airport ground transport** to a time when technology and funding catch up.

# Three Take-Aways on the Focus Group's Recommendations on Improving *Airport Connectivity*:

1. Include **public and private transportation modes, mass transit, a weather-protected multimodal transit center and coordinated traffic management**.

2. Hire a consulting team with **demonstrated experience and expertise** in designing and funding multimodal airport ground transportation facilities.

3. The airport is and should be an **integral part of the Roaring Fork Valley transportation network**. The challenge will be to balance community character and values with improved functionality.

# *Thank You*



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# Airport Experience Working Group

# The Strategic Questions

***Based on our values, our goals of limited enplanement growth, and our goal to reduce CO2 emissions, what would a warm, welcoming and comfortable terminal look like?***

- *How could it best "fit" the community?*
- *What are our terminal and landside options?*
- *How could our building size, function, number of gates, etc. best reflect our values, planning directions, and goals?*

# Meeting Schedule


**Meeting 1: Sept. 24th |** Discussed existing conditions and deliverables to AVC

**Meeting 2: Oct. 2nd |** Recommendations were discussed and voted on

**Meeting 3: Oct. 21st |** Described functional components of terminal areas and aligned recommendations with Community Character Working Group recommendations

**Meeting 4: Oct. 30th |** Strategized on site/terminal planning options, approved Terminal Layout Graphic

**Meeting 5: Nov. 6th |** Reviewed work to-date, started developing Report Out Document

**Meeting 6: Dec. 4th |** Reviewed, Edited, and Approved Final Report Out Document



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# Airport Experience Working Group Minority Report

# Airport Experience Working Group Majority Report

# Aligning with CCWG's Success Factors

✓ Reflect the Local Culture and Values

- Terminal to fit with the Aspen/Pitkin County Design Guidelines (see PowerPoint from 3rd meeting).

✓ Environmental Responsibility

- Support the environmental direction of a minimum of 30% reduction in aircraft emissions. Incorporate highest levels of environmental stewardship in the design and materials for the terminal and all related facilities.

✓ Economic Vitality

- Maintain existing levels of passenger service while having flexibility for possible .8% growth.

# Design

## Scenic Impacts / Aesthetic Overview

- **Scale**: Low, horizontal profile; relate to site context
- **Roof Articulation:** Simple forms; structurally expressive; relate to terrain
- **Facades:** Accent entries; complimentary materials; human scale elements
- **Entrances:** Inviting and easily identifiable
- **Building Heights:** Utilize varied massing to minimize perceived height
- **Exterior Materials:** Complimentary materials and colors; minimum maintenance
- **Landscape:** Emphasize Integration of landscape with site and building elements
- **Exterior Lighting:** Minimal, unobtrusive, shielded lighting
- **Regional Expression** Relate to the site context and unique Aspen character
- **Strong Interior / Exterior Expression:** Emphasize connection to the natural environment – "**Sense of Place**"






# Aligning with CCWG's Success Factors

✓ Design Excellence

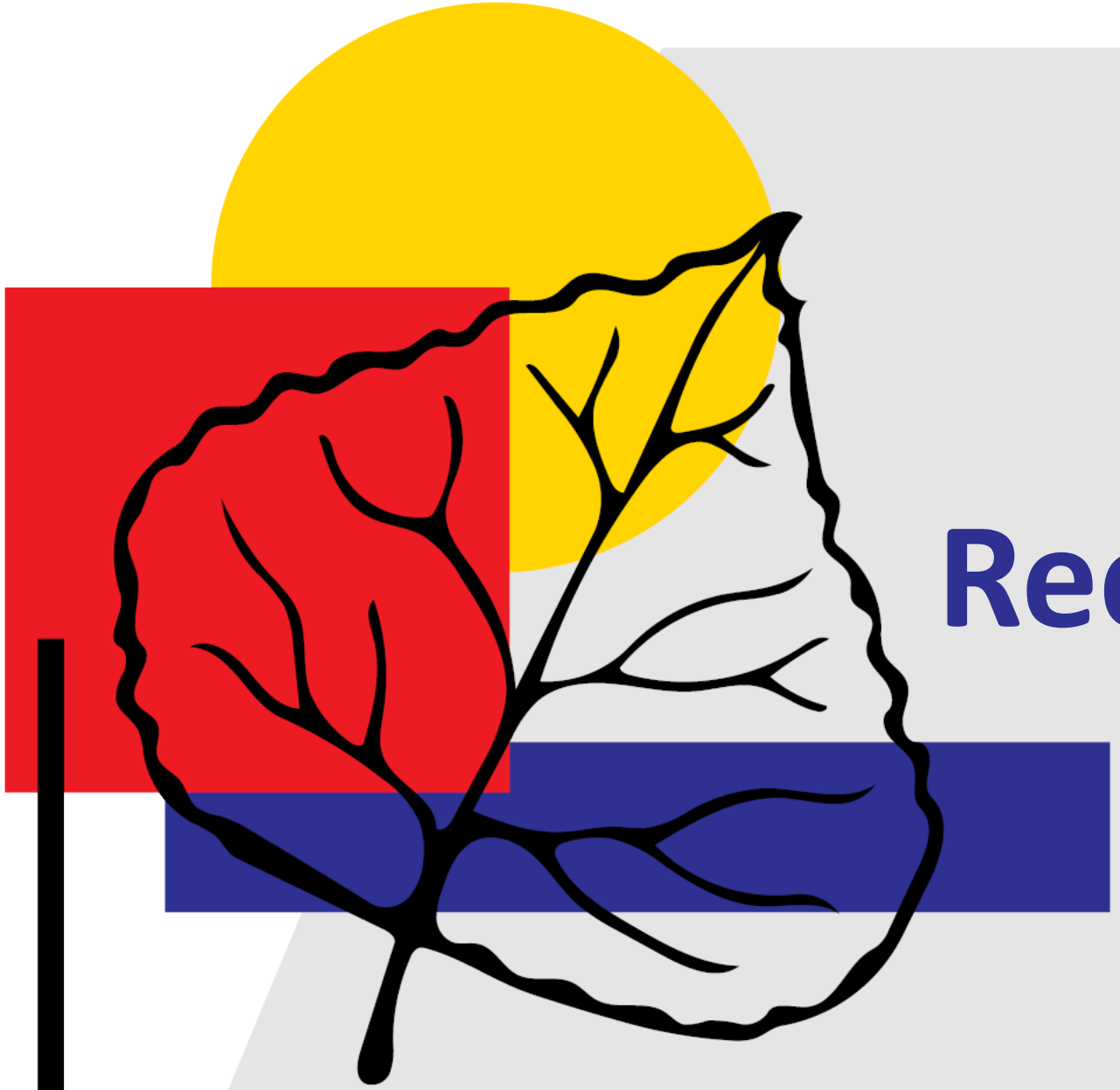
- Give designers flexibility and creative options.
- Have several options (layouts) produced.
- Designed to fit with the Aspen/Pitkin County Design Guidelines.

✓ Responsibility to Preserve the High Quality of Life

- Maintain existing level of air service, plan for small growth, implement highest environmental standards, and provide best guest experience

✓ Adaptable and Flexible for the Present and Future

- Design flexibility into the layout allowing for planned expansion as-needed.



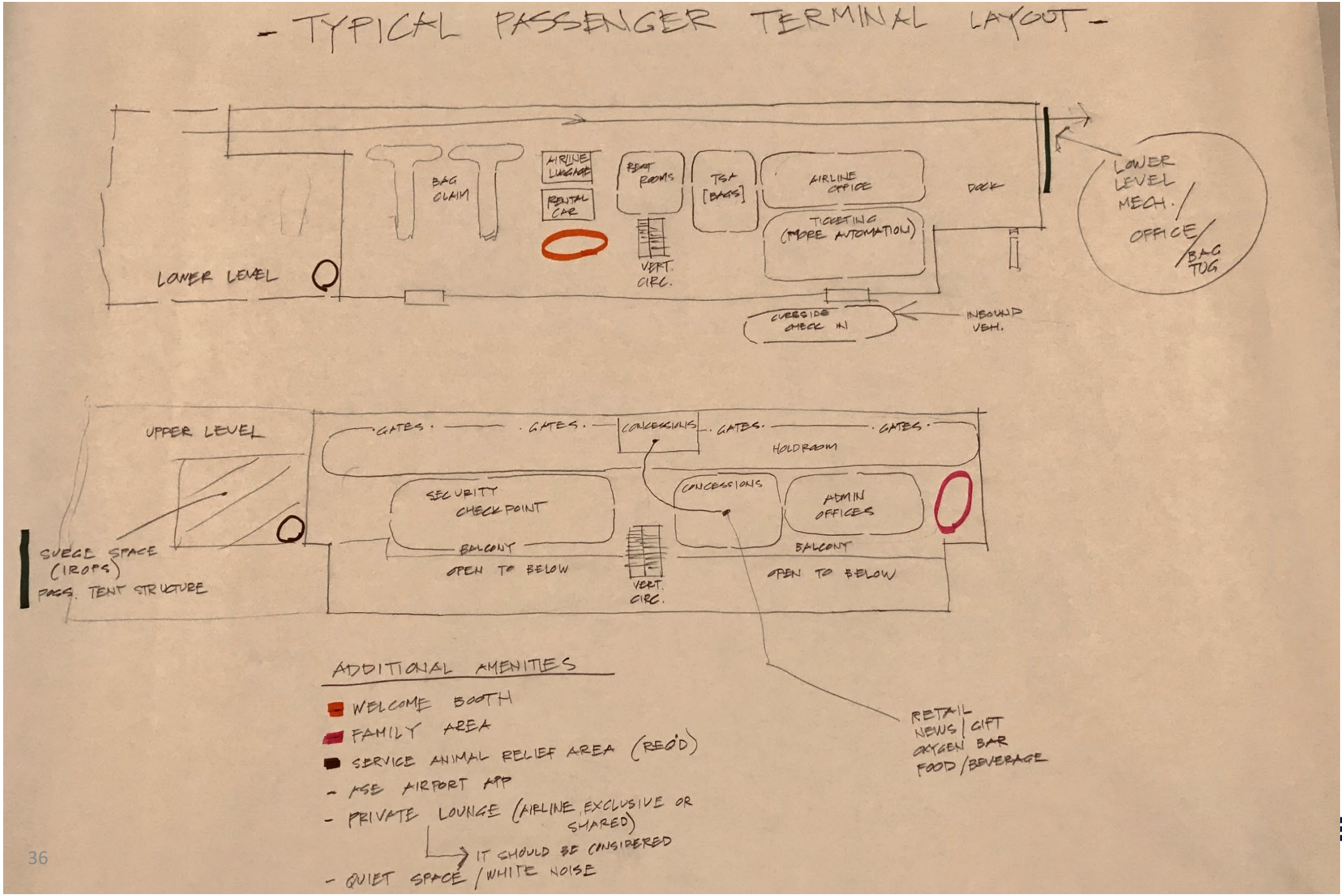
# Votes & Recommendations

# Motions

- Eight gates with planned expansion as-needed in the design.
- Support additional stories that keep within the Aspen character to support appropriate massing taking into consideration topography and phasing.
- Design should incorporate best practices worldwide for employee accommodation and operational efficiency.
- Rental housing dedicated to Airport Workforce Employees should be incorporated into this process.

# Motions

- Go with jet bridge vs. tarmac with caveat of modification to design for open air/fresh air and visual experience with views or mountains, maybe with glass.
- Two baggage carousels with possibilities of expansion.
- Rental car counters are adjacent to baggage claim area.
- Design aesthetics align with the Aspen/Pitkin County Airport Design Guidelines as referenced in Meeting #3 PPT
- Endorse Typical Passenger Terminal Layout with added comments and additions as indicated on the Layout graphic.




Approved as recommendation by AEWG



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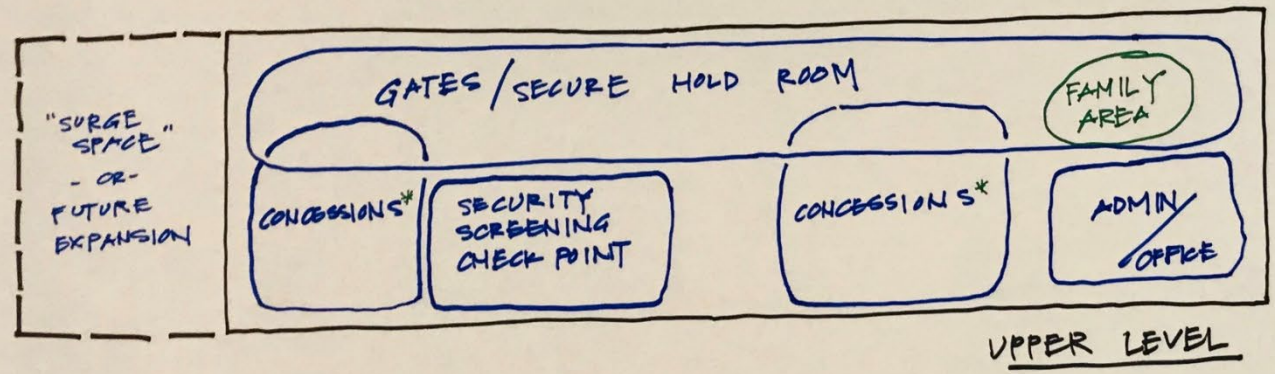
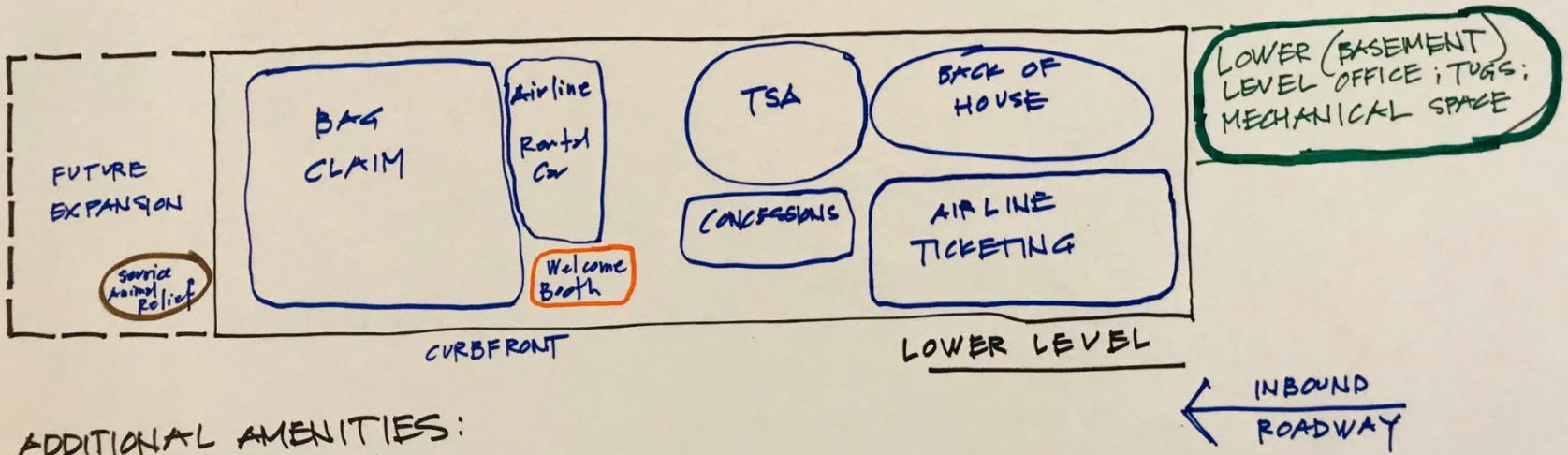
ASE VISION PROCESS
AIRPORT EXPERIENCE GROUP
10.30.19

# - TYPICAL PASSENGER TERMINAL LAYOUT -




ADDITIONAL AMENITIES:
- ASE AIRPORT APP
- PRIVATE LOUNGE (CONSIDER IT)
- QUIET SPACE

*CONCESSIONS: Retail; News; Gift; Food & Beverage

Simplified version



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# Recommendations

- Need overflow area for luggage that meets safety and TSA requirements
- Must have a welcome booth more visible area in baggage claim
- Airport should be planned to support multimodal forms of transportation
- Hotel shuttles/taxis/rideshare all share the same facility (easily visible islands for all options)
- Expand curbside check-in for all airlines
- For safety, have clear sidewalks with either shelter/overhang or with geothermal design

# Recommendations

- RFTA airport-specific bus that picks people up and drops them off at Ruby Park and Brush Creek.
- More taxis. A lot of times you wait for the taxi to come back to leave the airport.
- Should be thinking into the future with autonomous vehicles. If you have plentiful parking people will use it.  If you limit parking and make it premium, then only those who need it will use it. Value hunters will find other options such as RFTA.
- Need to consider older demographic and carrying bags long distance.
- Enhance short-term, employee, etc. parking. Long-term should be found somewhere else and public transit can be stressed.

# Recommendations

- Have a discussion on how the airport can address both commercial and GA users.
- Terminal layout: seems like a lot of space is being taken up for airport staff offices, etc. Can we make it three floors or put the offices in a lower level? Note how important natural light is for employees in offices.
- Develop ASE Airport App.
- Automated kiosk as much as possible.
- Private lounge, which is an expensive space, but all airlines have stated that they would like to have this space.
  - ***Idea:*** a lounge run by Aspen (not airlines) and County/Airport keeps any profits.
- Figure out how concessions can make a profit
- Recomposure area (post security screening check point)



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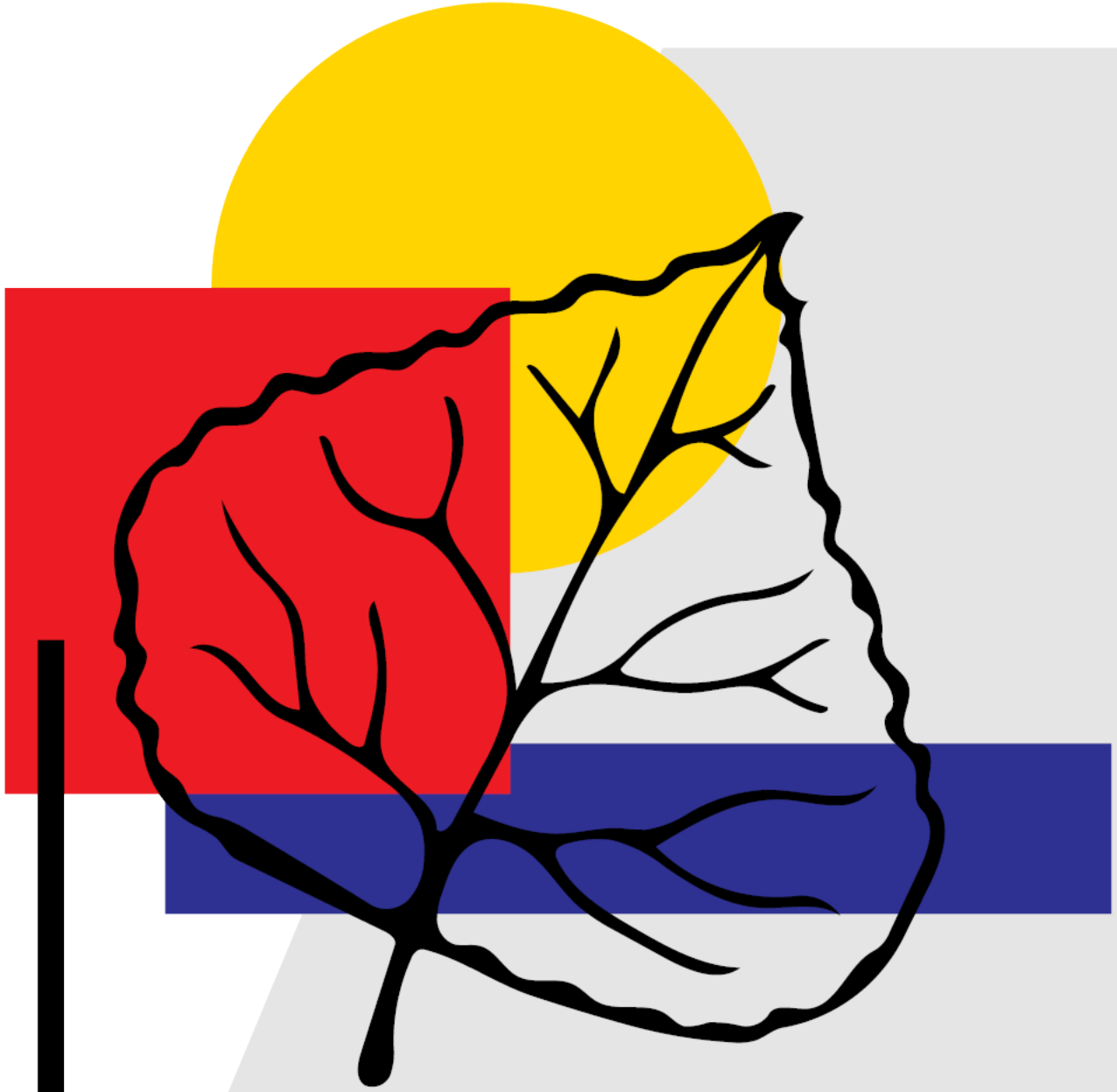
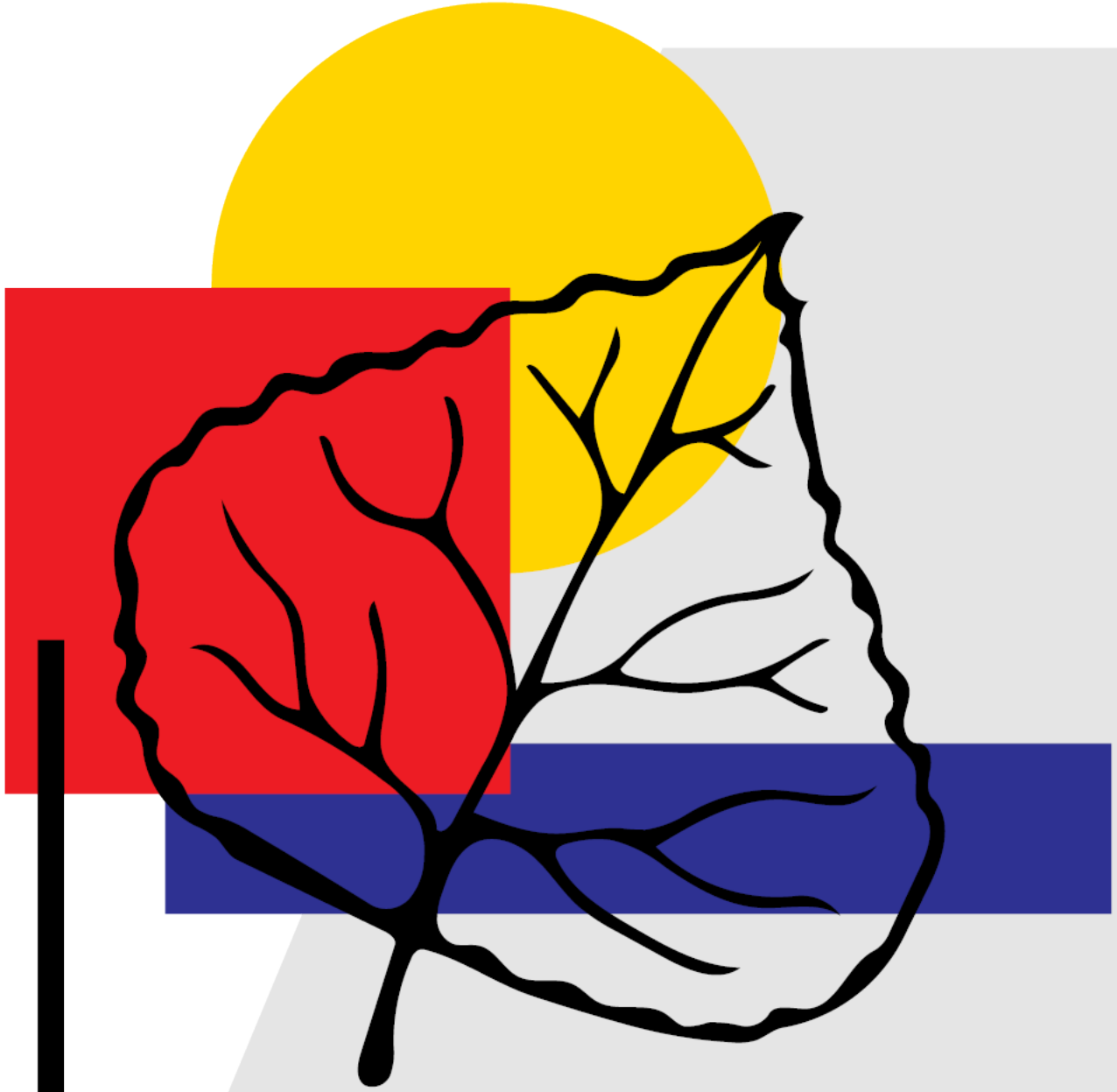


# Thank You

## Questions?



# BREAK
# 10 minutes

# Technical Working Group

# Introduction and Process

# Technical Working Group

## Strategic Questions

***To meet our community values and goals what is our preferred "design aircraft"?***

- *How could the existing or future "fleet mix" meet the air pollution reduction, limited enplanement growth, and noise abatement goals established by the ASE Vision process?*
- *In light of those community goals, what does the future airfield look like in terms of safety and airport design?*
- *What are the implications of the status quo VS Airplane Design Group II VS Airplane Design Group III? Could any variations exist within these design groups that might help us attain our community goals?*
- *How could our future airfield be as green and carbon neutral as possible?*



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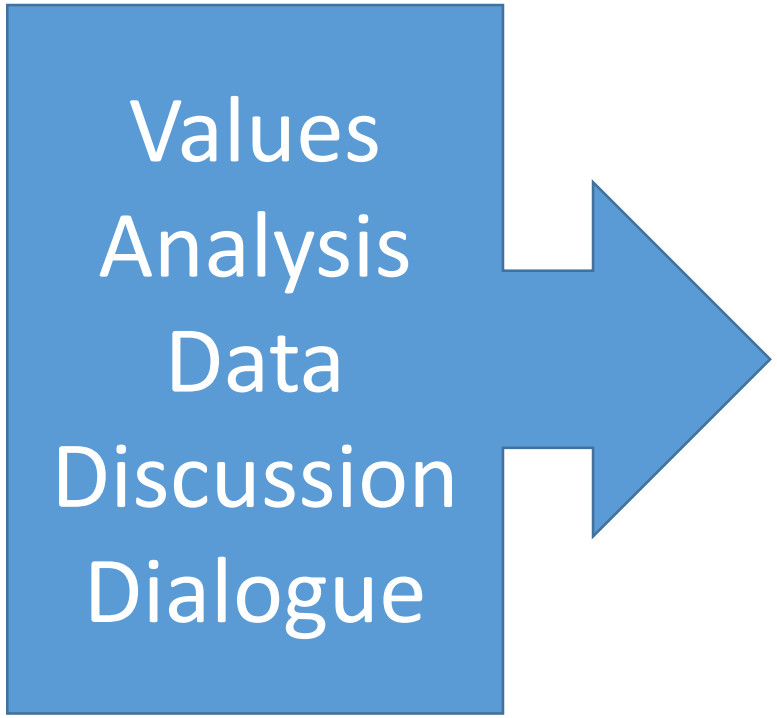
# Technical Working Group's Road to a Recommendation




I. History of Airport
II. Mission and Meeting Summary
III. Technical Working Group Findings
IV. Technical Working Group Recommendations
V. Vision Committee Questions
VI. Community Character Success Factors
VII. Climate Mitigation Goals
VIII. Appendices



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# Presenters

**Chris Bendon, Technical Working Group**

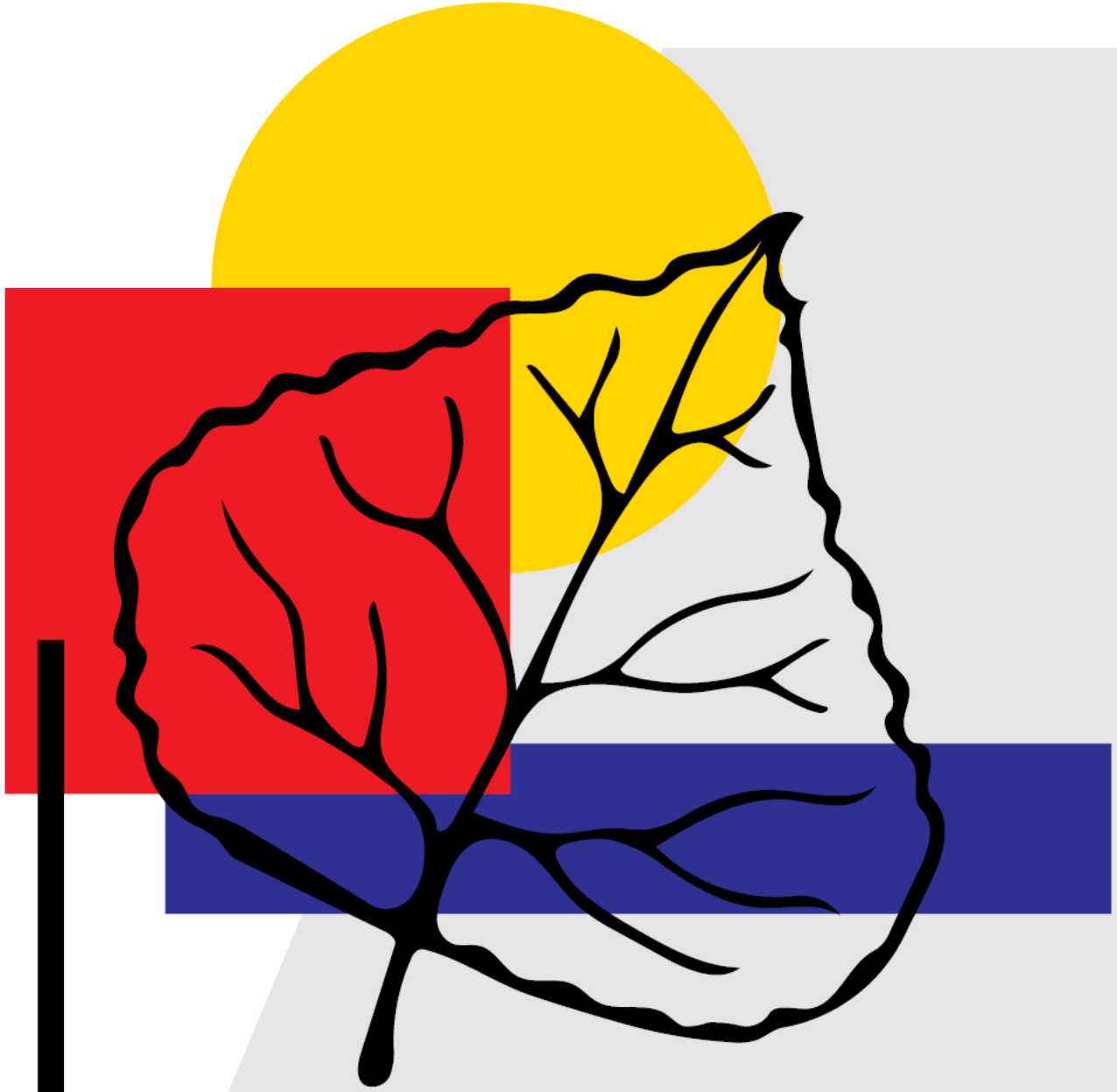
- Key Findings

**Bill Tomcich, Technical Working Group**

- Recommendations

# Technical Working Group Members

- Mariana Azevedo
- Chris Bendon
- David Corbin
- Lanny Curtis
- Michael Goldberg
- Bruce Gordon
- Richard Heede
- Philip Holstein
- David Johnson
- George Johnson
- Jonathan Jones
- Howie Mallory
- David Peckler
- Peter Petrie
- Michael Solondz
- Bill Tomcich
- Michael Waters



# TWG Minority Report

# Technical Working Group Majority Report

# Technical Working Group Key Findings

# Start with the Facts to Develop Findings

## *Key Categories*

- Safety
- Commercial Airplane Availability
- General Aviation Aircraft
- Scope Clause
- Phasing

# SAFETY #1 Priority

- From 1980 to today commercial operations at ASE have been very safe with only one commercial aircraft incident, which resulted in minor damage and no injuries.

- Commercial pilots operate under strict operating procedures and training required by airlines and FAA that reduce the likelihood accidents.

# Commercial Airplane Availability

- **CRJ 700** is the only commercial aircraft operating at ASE and is being phased out by some airlines today, the last of which will likely be retired in the next 10-20 years and replaced with narrow body aircraft that better align with community values.

- The next generation commercial aircraft are quieter, more fuel efficient, and will require fewer operations, but have wingspans that exceed ASE's current 95' limit.

# General Aviation

- The Aviation Activity Forecast projects modest growth in GA operations regardless of future changes to airfield geometry.

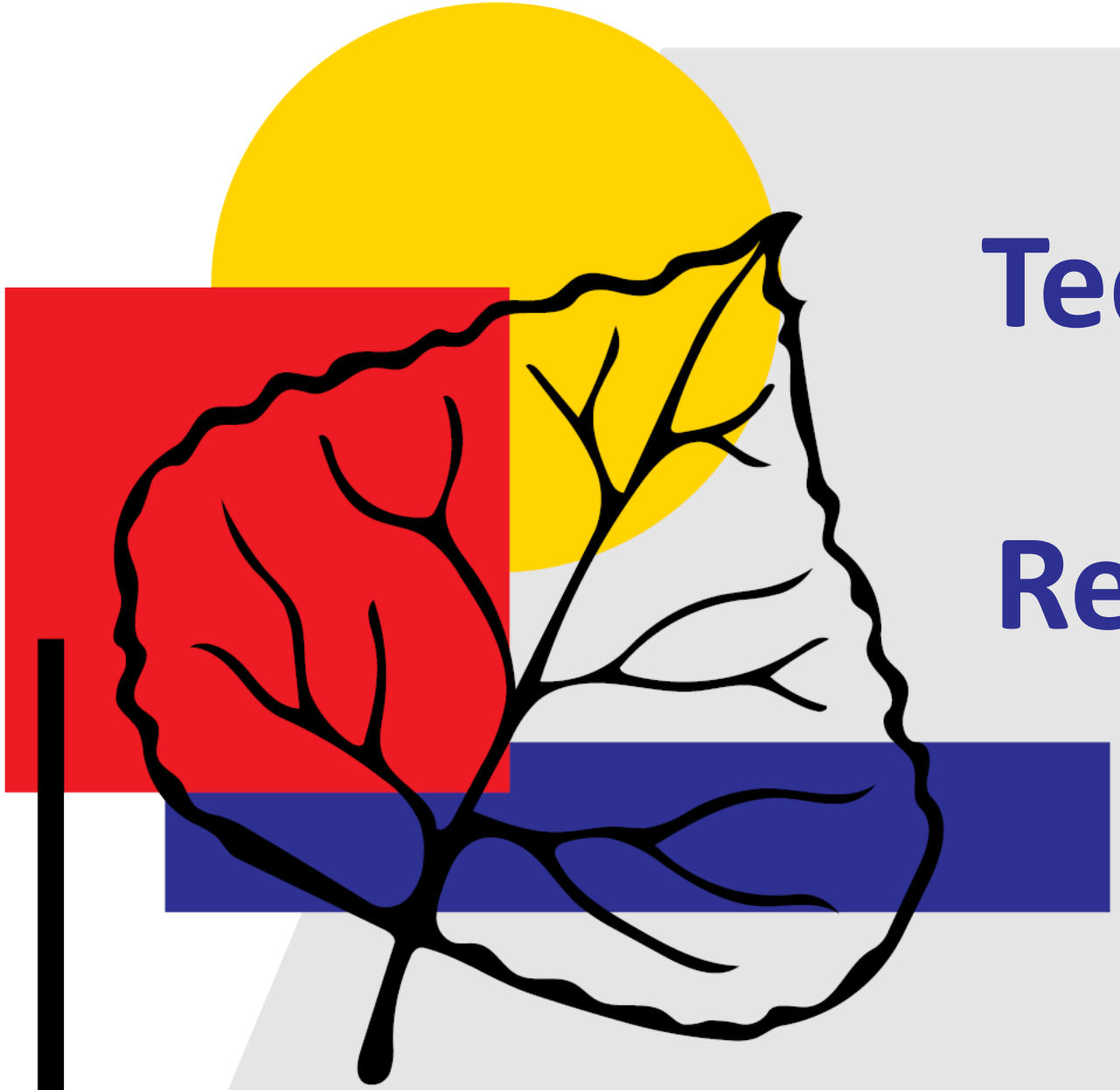
- Newer GA Aircraft have more efficient engines and are quieter.

# Scope Clause

- **Scope Clause** is a pilot and airline contract that affects the fleet mix available at ASE.  As newer scope compliant aircraft are added to airline fleets, CRJ700's are being retired.

# Phasing

- **Phasing:** Potential improvements will require phasing to ensure the airport remains operational during busy seasons. Additionally, the scope of the project may also require phasing to be economically feasible depending on FAA grant availability



# Technical Working Group Recommendation

# Airfield Recommendation

The risks associated with the uncertainty of any future aircraft with wingspans of 95' or less actually being able to operate at ASE, and the likely degradation of commercial air service into ASE is more consequential than the undesired impacts of the possible introduction of some mainline aircraft. The TWG recommends moving forward with **removing the Non-Standard conditions at ASE and building an ADG-III airfield that fully complies with ADG III separation standards.**

The TWG also recommends that the County explore **phasing options to meet full ADG III compliance.** Phasing should be prioritized to first meet separation standards, followed by runway strength (weight capacity; and finally runway width (approach speed).

# Mitigation Strategies

***Reduction Emissions***

- A goal should be established to **reduce total emissions at ASE by 30%** by the year 2030. TWG believes this to be an aggressive, but attainable goal. This will be **measured by aviation fuel sales.** In the absence of reduced fuel sales, ASE should:
  - *Establish a Certified and Verifiable **Carbon Offset Program**;*
  - *ASE should be a **leading voice** supporting implementation of Bio-Fuels as an aviation fuel.*

- **Electrify airfield** to provide for electric ground support equipment, ground power and air tempering for both GA and Commercial ramps. This will significantly reduce APU usage, and noise/air emissions from ground equipment

# Mitigation Strategies

***Reduction Emissions***

- All new airport facilities should be designed to be **net zero – to the extent possible.**

- **Newer planes are more fuel efficient and quieter** than the CRJ-700 and include aircraft such as the Airbus A220-100 and has the potential to reduce operations.

# Technical Working Group

## Strategic Questions

***To meet our community values and goals what is our preferred "design aircraft"?***

- *How could the existing or future "fleet mix" meet the air pollution reduction, limited enplanement growth, and noise abatement goals established by the ASE Vision process?*
- *In light of those community goals, what does the future airfield look like in terms of safety and airport design?*
- *What are the implications of the status quo VS Airplane Design Group II VS Airplane Design Group III? Could any variations exist within these design groups that might help us attain our community goals?*
- *How could our future airfield be as green and carbon neutral as possible?*

# Preferred Design Aircraft

- Analysis of aircraft characteristics.
- Available aircraft in the 20 year horizon.
- CRJ 700 Baseline
- Ranked and scored based on emissions, noise, operations needed to accomplish enplanement goals.
- Top five aircraft ranked higher than the CRJ 700.
- NextGen aircraft are better aligned with community values.

# Community Character Lens

- Safety in the Air and On the Ground

  *Work with FAA to maximize safety and enhance airspace.*

  *Enhance training and resources for pilots.*

- Airside Community Character

  *Next Generation of Aircraft more inline with Community Character, newer planes burn less fuel and are quieter.*

  *Modest growth is estimated for GA operations.*

- Environmental Responsibility

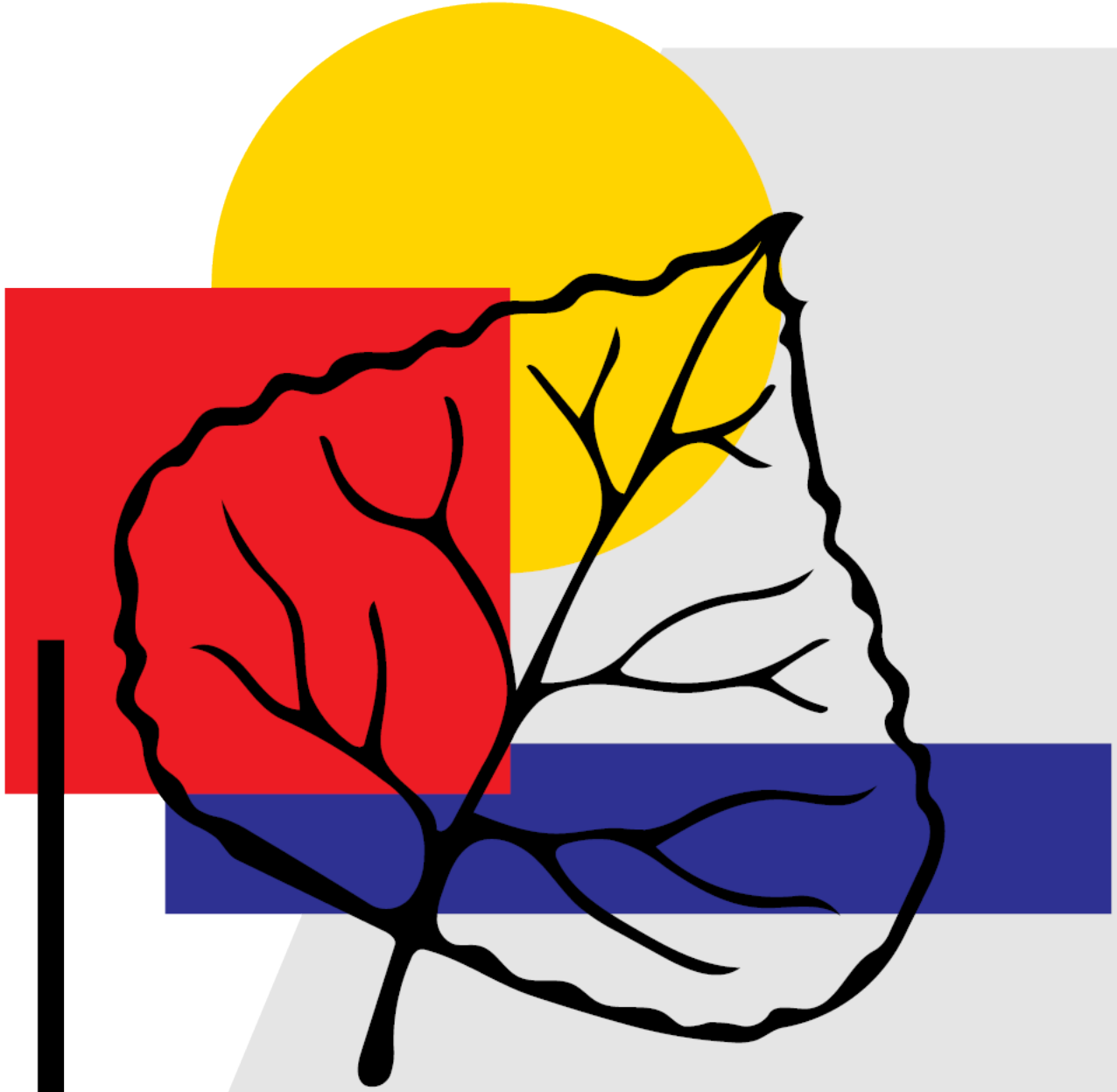
  *Promotion of the use of aviation biofuels in servicing local aircraft. Work with local partners. The goal is a 30% reduction in emissions, measured by fuel sales. In the absence of reduced fuel sales we offset by other means, i.e. Cardon Offset Program*

  *Electrification of Airfield.*

- Reflect the Local Culture and Values

  *Maintaining Limited Growth: Larger aircraft ( > 76 seats) will result in fewer operations.*

  *Reduction in Noise: The Airbus 220 (100 and 300), Boeing 737-Max is a quieter aircraft than the CRJ 700 in all segments of the ICAO data.*

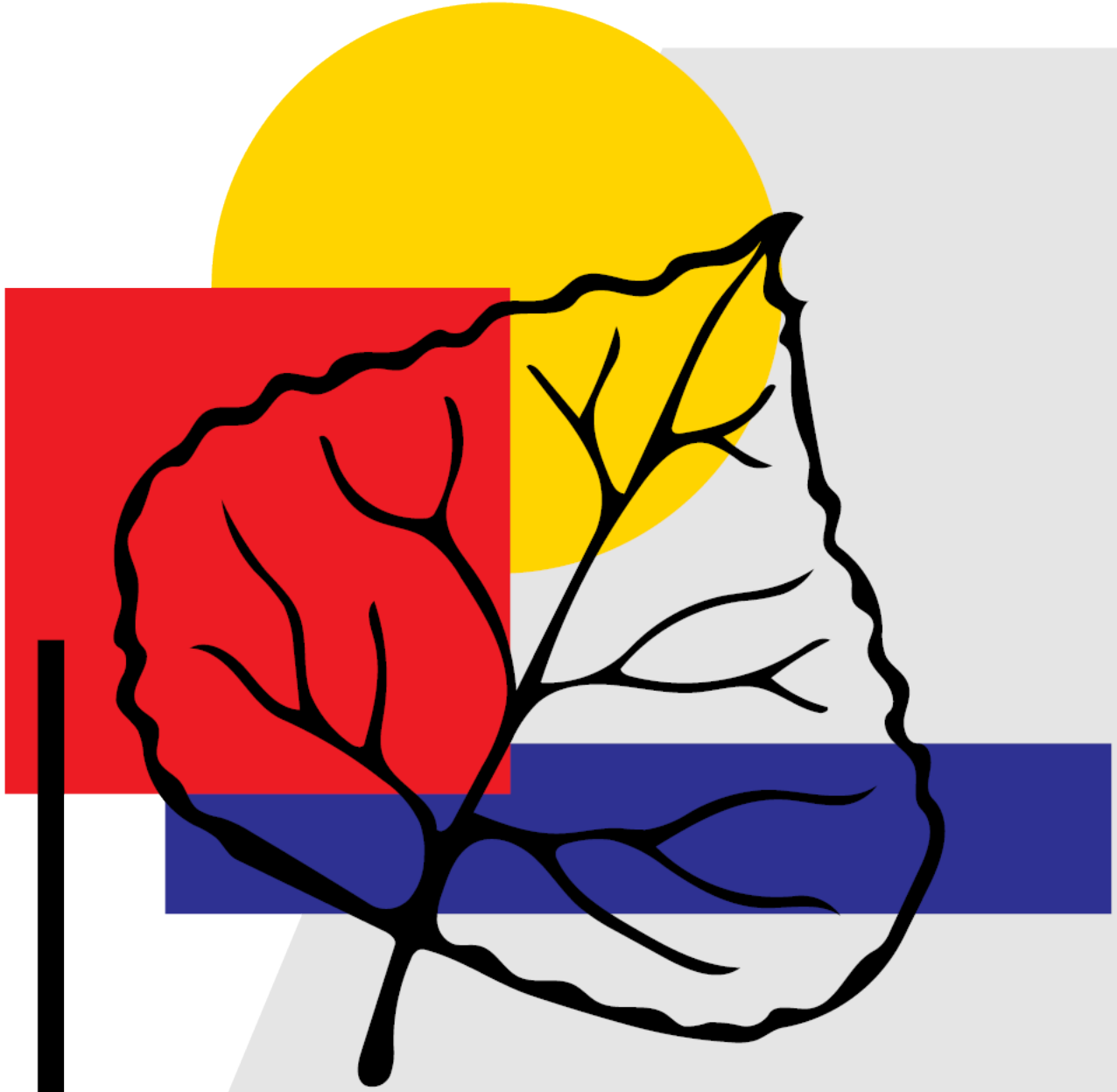


# *In Closing*
# THANK YOU!

# Next Steps with the Airport Vision Committee

# Airport Vision Committee Work Sessions

- Meet weekly on Thursdays, 4-6PM at Board of County Commissioners Meeting Room
- First meeting is Thursday, January 9th
- Focus
    1. Considering each groups recommendations
    2. Developing final recommendations
- Plenary report out to all Working Group members in 1st Quarter



# Thank you!