



# Mountain Summit 2019

*Using the Room Optimizer to it's Fullest!*

*Christie Roberts, Associate Registrar*

# Institution Background

## Who is Texas A&M University- Corpus Christi?

- 12,000 students and part of The Texas A&M University System.
- The Island offers more than 250 days of sunshine, a Gulf breeze, and mild weather year-round.
- Ad Astra Client of 10 + years
  - Schedule
  - Platinum Analytics



# Presenter Background

## Who am I?

- Christie Roberts, Assistant Registrar
- Graduated from TAMUCC- 2006
- Worked in Registrar's Office since 2008
- Campus using Ad Astra since 2007 and our office took over in 2012







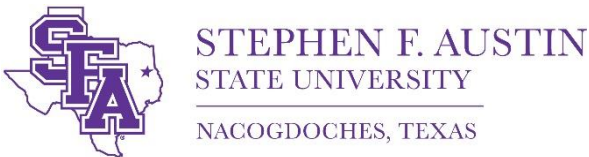
ALAMO COLLEGES DISTRICT



The rising STAR of Texas



UNIVERSITY OF HOUSTON



TEXAS A&M UNIVERSITY KINGSVILLE



# Room Optimizer Definitions

Meetings: that were scheduled by the room optimizer

- Drag building and room columns next to the section
- Review what rooms sections were assigned (validation)

Meeting Patterns that were part of the optimized term:

- Sort number of sections in descending order
- Review how many times/days are rarely used

Bottleneck Sections: those that were not scheduled because another section needing the space at the same time

- Expanding sections shows the rooms a section could have been scheduled into if it were available

# Room Optimizer Definitions

Bottlenecked Rooms: The most popular rooms at the most popular times

- Find trends in spaces
- Specific features or room types?

Infeasibles: Sections that could not be scheduled because the required space doesn't exist:

- Seat fill
- Invalid preferences
- Tip: Address infeasibles before bottlenecks

# Optimizer Explained

- Sandboxes
  - Creates copy of term or previous sandbox and uses an algorithm to schedule unplaced classes into rooms based on preference sets, filters, and settings
- Adjustable Settings
  - Minimum Seat Fill
  - Preference weights
  - Scoring Balance
- Filters
  - Regions, Buildings
  - Campus, Meeting Types, Subjects, Departments, Time Frames

# Schedule Policy Development

- Departmentally “Owned” Spaces
  - Deans and Departments now understand how each classroom fits into the SUE puzzle
  - Reports and training
  - Conduct space audits with facilities to monitor actual use of rooms
- Changing The Way We Think About Scheduling
  - Not just a “computer” scheduling but an actual person piecing together the puzzle



# Optimize Your SUE Score!



## WHAT?

What is a SUE score ?



## ENGAGE

Meet with your campus community and learn who has space!



## LEARN TO LOVE

Understanding the SUE score and what it means for your campus.



## OPTIMIZE

Optimize course schedule



## COMMUNICATE

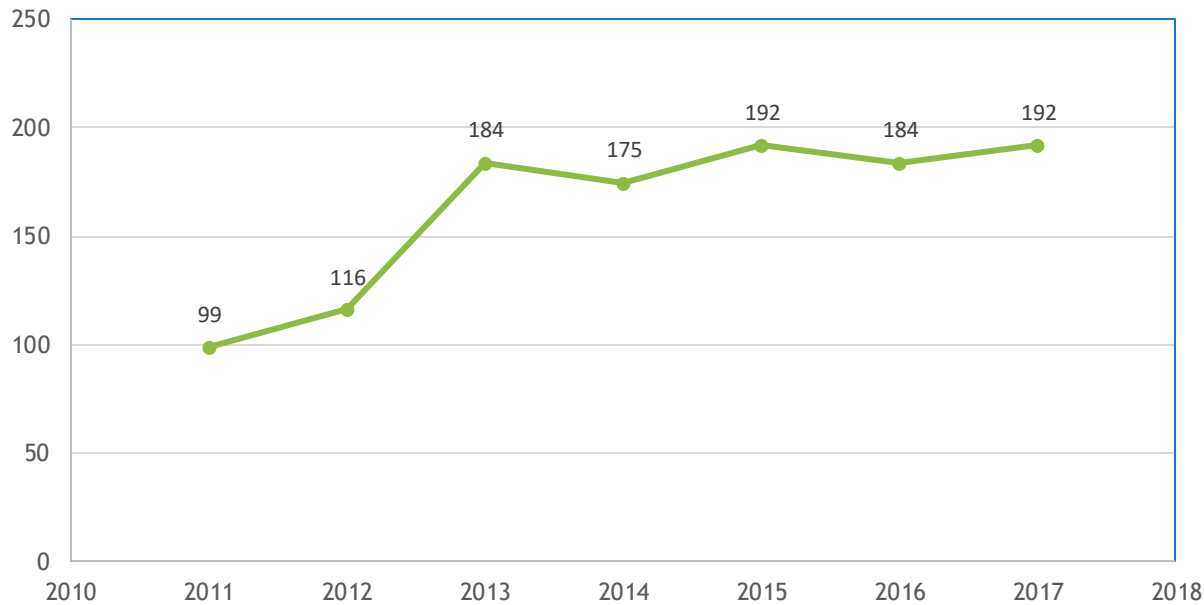
Communication to campus community



## OPPORTUNITIES

More scheduling Opportunities

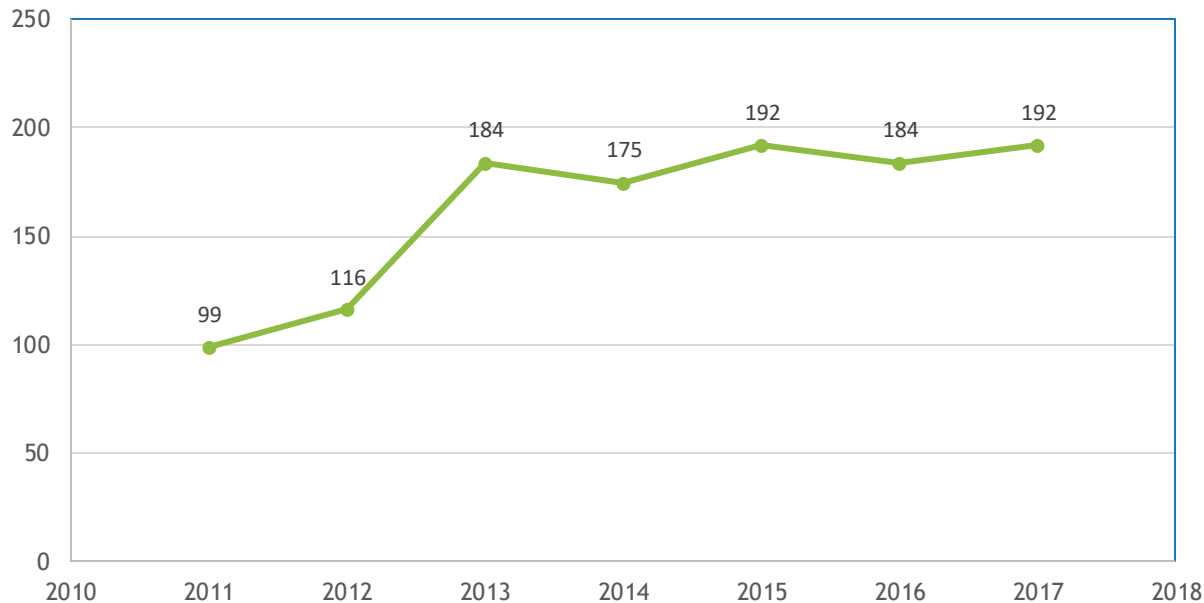
SUE Score, 2011-2018



- TAMU-CC started using Ad Astra in 2007
- TAMU-CC started using the Optimizer in 2013

**\*\*The Office of the University Registrar began scheduling in Spring 2013\*\***

SUE Score, 2011-2018



- **Our office scheduled 3,806 courses into classrooms, class labs, studios and computer labs.**
- **The SUE score improved to an overall score of 192. We received a perfect classroom score of 100 and a class lab score of 92.**

**\*\*The Office of the University Registrar began scheduling in Spring 2013\*\***

# Best Practices Prior To Optimization

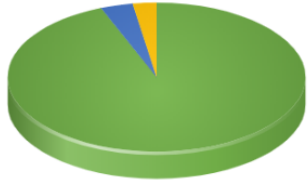
- Data Clean Up (Prior to Term Import)
  - Ensure section imports data is mapped appropriately from the SIS to Astra Schedule
  - Have Facilities Involved/ Walk the campus to keep inventory up to date
  - Ensure accurate Room Types and Features
  - Reports check for mis-scheduled classes, Invalid combined sections, etc...
- Special Requests (Between Term Import and Optimization)
  - Placing matching classes, special instructor needs, etc...
  - Documented information due to our office by Data Entry Deadline
  - Mark totally non-standard sections as “Do Not Optimize”
- Department Space
  - Typically allow two weeks for departments to place their labs / seminars in their own space before beginning optimization

# Reading Results and Comparing Runs

Fall 2017 - Lectures Only - 70% Seat Fill

Prepare to Publish

Statistics			
Scheduled:	401	Total Meetings:	6473
Bottleneck:	15	Total Optimized:	427
Infeasible:	11	Total With Room:	786
		Total Unscheduled:	5687
		Do Not Optimize:	0
		Online:	0
		Arranged:	0
		Invalid Mtg Pattern:	4559



● Scheduled ● Bottleneck ● Infeasible

Filter

Show Mtgs: Modified |

- Room Status
- Subject
- Course
- Department

Scheduled Results												
	Subject ^1	Course #	Section	Days	Start Date	End Date	Start Time	End Time	Enrollment	Meeting T...	Meeti...	Time Tem...
		ANTH	190	01	TR	08/23/2017	12/08/2017	07:30 PM	08:45 PM	35	LEC	Secti...
		ANTH	150	01	MW	08/23/2017	12/08/2017	06:00 PM	07:15 PM	50	LEC	Secti...
		ANTH	117	01	TR	08/23/2017	12/08/2017	04:30 PM	05:45 PM	45	LEC	Secti...
		ANTH	005	01	MW	08/23/2017	12/08/2017	04:30 PM	05:45 PM	210	LEC	Secti...
		ANTH	110	01	TR	08/23/2017	12/08/2017	09:00 AM	10:15 AM	45	LEC	Secti...
		ANTH	100	01	TR	08/23/2017	12/08/2017	03:00 PM	04:15 PM	40	LEC	Secti...

# Managing the Change

- Stop pre-assignments and roll forwards!
- Deal with the political porcupine!
- Support policy and change on campus!
- Create What-If? Scenarios!
- Use results and reporting to succeed!



Questions?