



ISLANDS OF DATA: CONNECTING STUDENT RETENTION TO THE NATIONAL STUDENT CLEARINGHOUSE

TEXAS A&M UNIVERSITY – CORPUS CHRISTI

Agenda

- Intuitional Background
- Institutional Data Need and Planning
- Data Collection, Database Creation and Validation
- Next Steps

TEXAS A&M UNIVERSITY – CORPUS CHRISTI

- "The Island University"
- Established in 1947
- Research II Institution
- Hispanic Serving Institution (HSI)
- 6 colleges and 1 school
- Fall 2024 Enrollment: 11,266
- Offer bachelor's, master's, and doctoral degrees



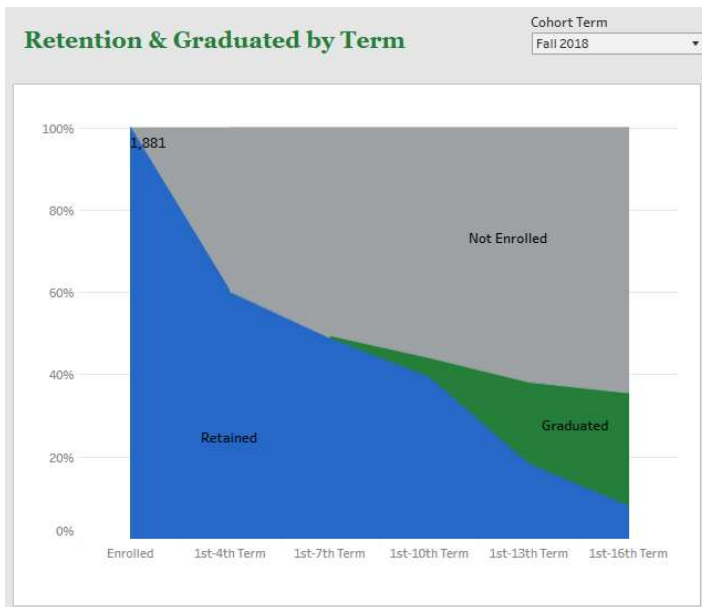
PAIRS –TAMUCC (Planning, Analytics, Institutional Research, & Strategic Initiatives)

Three Areas

- Planning and Institutional Research
- Analytics
- Strategic Initiatives



Institutional Need



Where do these students go?

- TAMU-CC participates in the Program for System Admission (PSA) within the TAMU system
 - High Transfer-out rate (41% vs. 6-year Grad Rate = 40%)

University Retention Rate	PSA Student Retention Rate	Non-PSA Student Retention Rate
60.2%	22.9%	67.3%



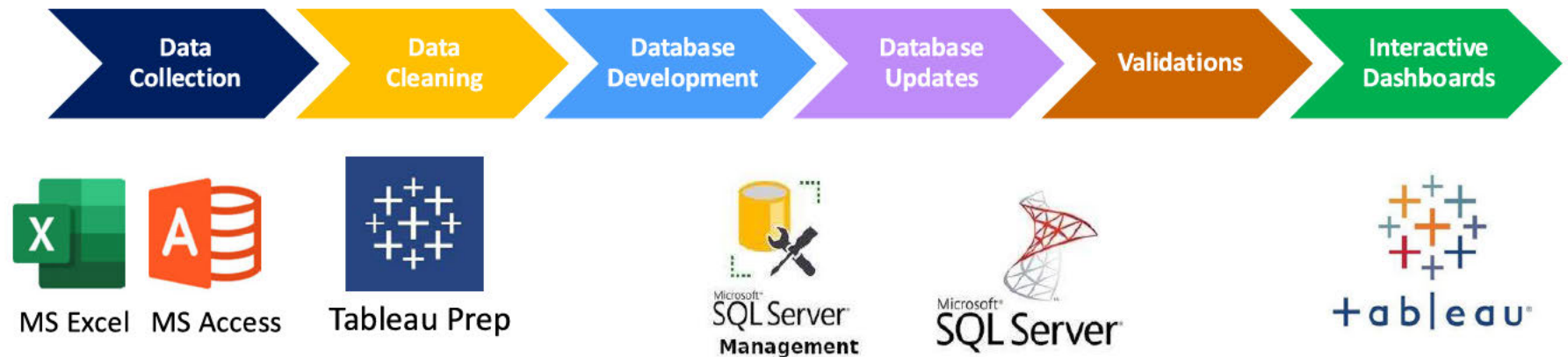
A woman is seen from the chest up, looking down at a laptop screen. The scene is dimly lit, with a dark blue background. There are several out-of-focus light spots (bokeh) in the background, suggesting an indoor setting with ambient lighting. The overall mood is professional and focused.

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PLANNING PROCESS

Process Overview

- Data sources:
 - TAMU-CC Retention Database
 - National Student Clearinghouse
- Tools for collection, clean-up, development, validation, and analysis



PLANNING & DECISION-MAKING

- Subsequent Enrollment NSCH submissions using our existing Retention Database
 - Use the detailed file – multiple lines per student
 - Determine the dates for each subsequent enrollment term
- Establish rules to determine which student record to use

Record	Search	College Code	College Name	College	2-year /	Public /	Enrollment Beg	Enrollment Ei
Y	20180915	011161-00	TEXAS A&M UNIVERSITY - CORPUS CHRISTI	TX	4	Public	20180827	20181205
Y	20180915	011161-00	TEXAS A&M UNIVERSITY - CORPUS CHRISTI	TX	4	Public	20190114	20190418
Y	20180915	012015-00	AUSTIN COMMUNITY COLLEGE DISTRICT	TX	2	Public	20190826	20191215
Y	20180915	012015-00	AUSTIN COMMUNITY COLLEGE DISTRICT	TX	2	Public	20200121	20200517
Y	20180915	012015-00	AUSTIN COMMUNITY COLLEGE DISTRICT	TX	2	Public	20200601	20200809
Y	20180915	012015-00	AUSTIN COMMUNITY COLLEGE DISTRICT	TX	2	Public	20200824	20201213
Y	20180915	012015-00	AUSTIN COMMUNITY COLLEGE DISTRICT	TX	2	Public	20210119	20210516
Y	20180915	012015-00	AUSTIN COMMUNITY COLLEGE DISTRICT	TX	2	Public	20210601	20210808
Y	20180915	012015-00	AUSTIN COMMUNITY COLLEGE DISTRICT	TX	2	Public	20210823	20211212
Y	20180915	012015-00	AUSTIN COMMUNITY COLLEGE DISTRICT	TX	2	Public	20220118	20220515
Y	20180915	012015-00	AUSTIN COMMUNITY COLLEGE DISTRICT	TX	2	Public	20220531	20220808
Y	20180915	012015-00	AUSTIN COMMUNITY COLLEGE DISTRICT	TX	2	Public	20230821	20231210



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DATA COLLECTION

NSCH - Data Collection Process

Step 1: Pull Data from NSCH (Excel)



National Student
Clearinghouse®

Step 2: Retention Database (historical_cbm0c1 & historical_cbms)

- Tracks undergraduate through doctorate cohorts
- Cohort Types
- 24 semesters/8 years
- Retention/Graduation by:
 - College
 - Department
 - Major

Step 3: Data Cleaning

Step 4: Store Data in NSCH Database





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DATA CLEANING

NSCH - Data Cleaning Process

Step 1: Collect data from different terms and combine them (UNION in Tableau Prep).

Step 2: Initial data cleaning: Rename columns.

Step 3: Create calculated fields for 'Z_Term' (based on enrollment/graduation dates).

Step 4: Push into DB as 'NSCH return uncleaned all terms.'

Changes (2)

- Rename Field
File_Z_Term
From [Z_Term] to [File_Z_Term]
- Calculated Field
Z_Term
IF ([Graduated]='N') THEN IF(
RIGHT(LEFT(STR([Enrollment_Begin]),6),2)>='01'
and RIGHT(LEFT(STR([Enrollment_End]),6),2) <='05'
) THEN LEFT(STR([Enrollment_Begin]),4)+'1'
//20241 would be having range of (202401 to
202405)
ELSEIF(
RIGHT(LEFT(STR([Enrollment_Begin]),6),2)>='05'
and RIGHT(LEFT(STR([Enrollment_End]),6),2) <='06'
) THEN LEFT(STR([Enrollment_Begin]),4)+'7'
//20247 would be having range of (202405 to
202406)
ELSEIF(
RIGHT(LEFT(STR([Enrollment_Begin]),6),2)>='06'
and RIGHT(LEFT(STR([Enrollment_End]),6),2) <='12'
) THEN LEFT(STR([Enrollment_Begin]),4)+'9'
//20249 would be having range of (202408 to
202412)
END
ELSEIF ([Graduated]='Y')

Edit Field

Field Name: Z_Term

Reference: ABS(number)

Returns the absolute value of the given number.
Example: ABS(-7) = 7

```
IF ([Graduated]='N')
THEN
  IF(
    RIGHT(LEFT(STR([Enrollment_Begin]),6),2)>='01'
    and RIGHT(LEFT(STR([Enrollment_End]),6),2) <='05'
  ) THEN LEFT(STR([Enrollment_Begin]),4)+'1'
  //20241 would be having range of (202401 to
  202405)
  ELSEIF(
    RIGHT(LEFT(STR([Enrollment_Begin]),6),2)>='05'
    and RIGHT(LEFT(STR([Enrollment_End]),6),2) <='06'
  ) THEN LEFT(STR([Enrollment_Begin]),4)+'7'
  //20247 would be having range of (202405 to
  202406)
  ELSEIF(
    RIGHT(LEFT(STR([Enrollment_Begin]),6),2)>='06'
    and RIGHT(LEFT(STR([Enrollment_End]),6),2) <='12'
  ) THEN LEFT(STR([Enrollment_Begin]),4)+'9'
  //20249 would be having range of (202408 to
  202412)
  END
  ELSEIF ([Graduated]='Y')
```

Calculation is valid

Apply Save

PREPARATION AND CLEANUP FOR NSCH DATA

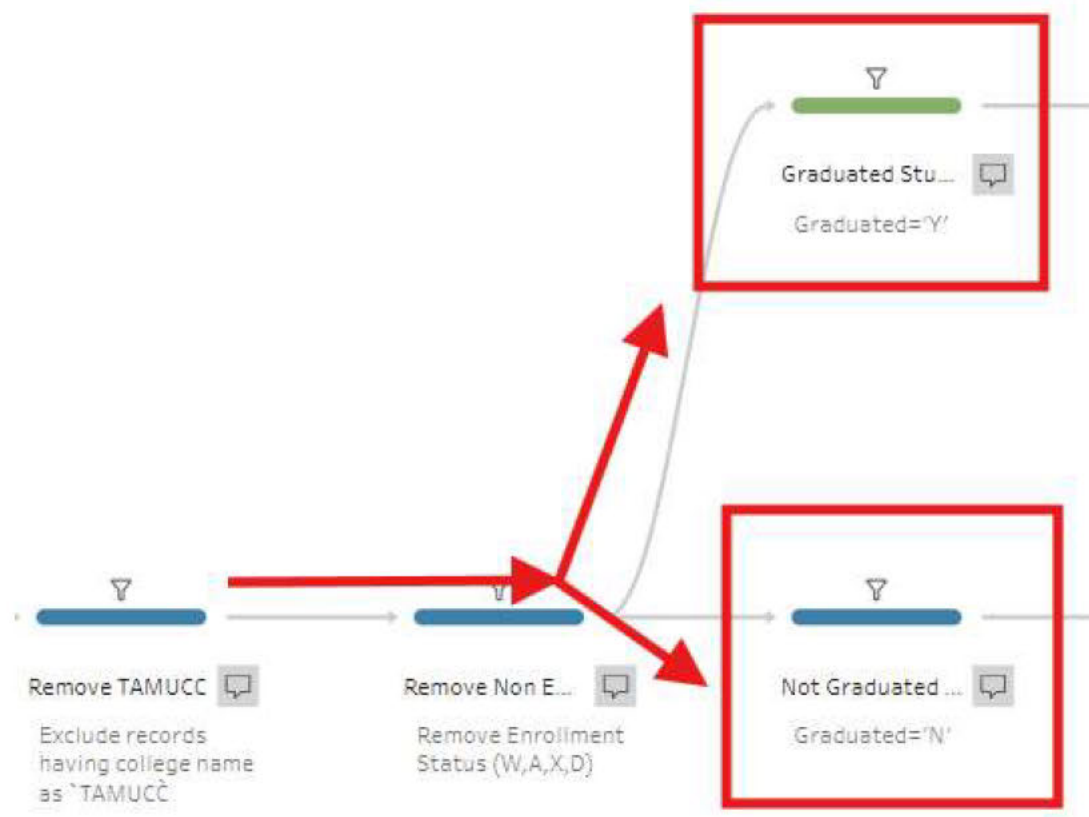
•Prep-Initial Cleanup:

- Remove TAMU-CC records.
- Exclude non-enrolled statuses (W, A, X, D).

- Filter for Not Graduated (Graduated = N).

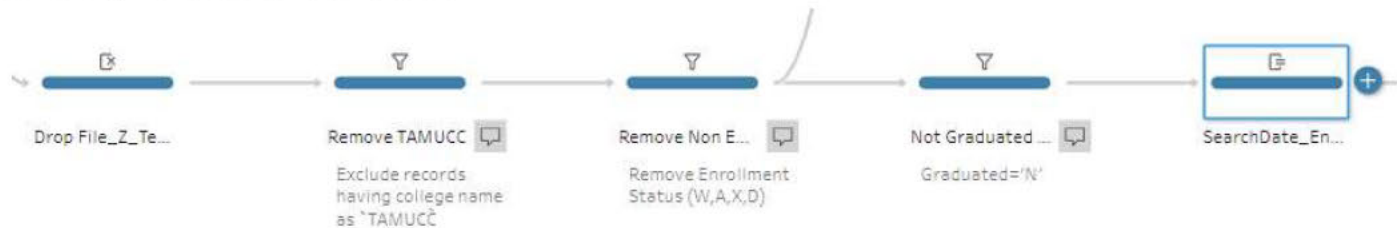
•Prep for Not Graduated Records:

- Create calculated fields for Start_Date and End_Date (based on Z_Term).
- Filter invalid enrollments using Enrollment Checker.



PREPARATION AND CLEANUP FOR NSCH DATA

- Filter for Not Graduated (Graduated = N).
- **Prep for Not Graduated Records:**
- Create calculated fields for Start_Date and End_Date (based on Z_Term).
- Filter invalid enrollments using Enrollment Checker.



SearchDate_Enrollment 35 fields: 718K rows Sampled Filter Values...

Changes (2)

- Calculated Field **Start_Date**
IF RIGHT([Z_Term], 1) = '9' THEN
LEFT([Z_Term],4)+'08' ELSEIF
- Calculated Field **End_Date**
IF RIGHT([Z_Term], 1) = '9' THEN
LEFT([Z_Term],4)+'12' ELSEIF

End_Date	Start_Date
<i>null</i>	<i>null</i>
201805	201801
201808	201805
201812	201808
201905	201901
201908	201905
201912	201908

PREPARATION AND CLEANUP FOR NSCH DATA

Prep for Not Graduated Records:

- Filter for Not Graduated (Graduated = N).
- Create calculated fields for Start_Date and End_Date (based on Z_Term).
- Filter invalid enrollments using Enrollment Checker.

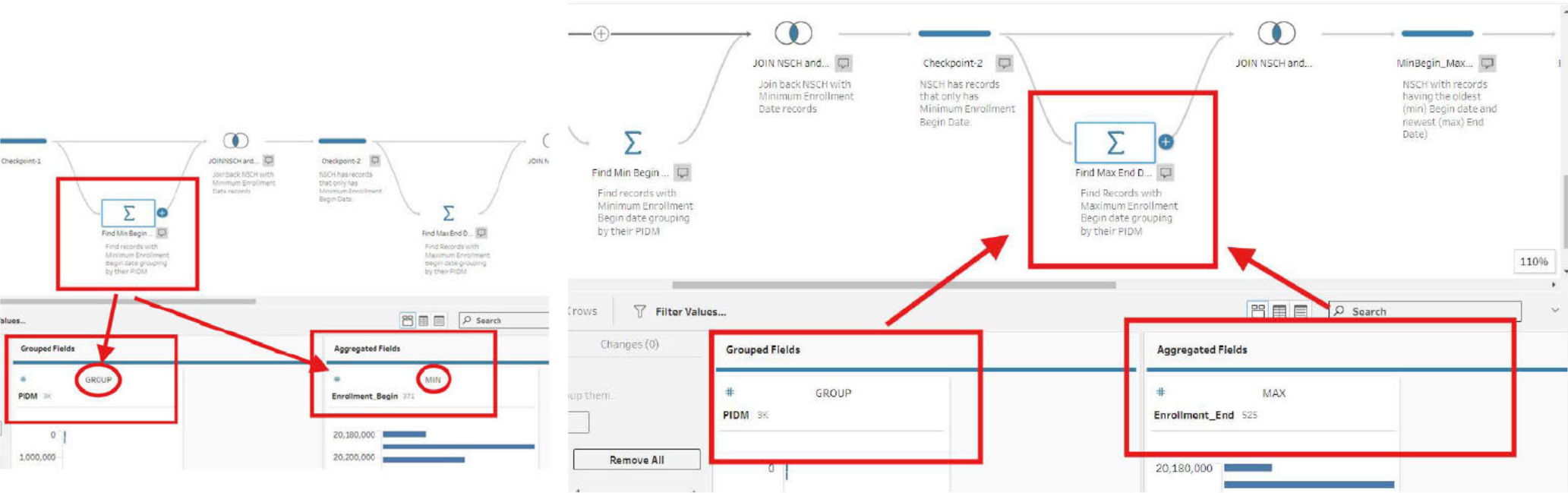
The screenshot displays a data pipeline workflow. The 'EnrollmentDate_Checker' step is highlighted with a red box. Below the pipeline, the 'EnrollmentDate_Checker' step is expanded to show its configuration. The 'Changes (2)' panel includes a 'Calculated Field' named 'EnrollmentChecker' with the formula `IF INT(LEFT(STR([Enrollment_Begin]),6)` and a 'Filter' named 'EnrollmentChecker' with the formula `NOT ([EnrollmentChecker] == "INVALID-Enrollment")`. The main data view shows columns for 'End_Date', 'Start_Date', and 'EnrollmentCh...' with a 'Valid-Enrollment' filter applied.

End_Date	Start_Date	EnrollmentCh...
201808	201805	Valid-Enrollment
201812	201808	Valid-Enrollment
201905	201901	Valid-Enrollment
201908	201905	Valid-Enrollment
201912	201908	Valid-Enrollment
202005	202001	Valid-Enrollment
202008	202005	Valid-Enrollment
202012	202008	Valid-Enrollment

PREPARATION AND CLEANUP FOR NSCH DATA

AGGREGATION AND JOINING – Not Graduated Records

- Aggregate Records:
 - Minimum Enrollment Begin Dates (grouped by Z_Term & PIDM).
 - Maximum Enrollment End Dates (grouped by Z_Term & PIDM).
- Inner Joins:
 - Minimum/Maximum Enrollment Dates with NSCH data.
- Remove Duplicate Records



PREPARATION AND CLEANUP FOR NSCH DATA

AGGREGATION AND JOINING – Not Graduated Records

- Aggregate Records:
 - Minimum Enrollment Begin Dates (grouped by Z_Term & PIDM).
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 - Minimum/Maximum Enrollment Dates with NSCH data.
- Remove Duplicate Records

JOINSCH and Aggregated records 38 fields | 0 rows

Settings | Changes (0)

Applied Join Clauses

Field: Enrollment_End | Checkpoint-2

PIDM | PIDM

Enrollment_End | Enrollment_End

Join Type: Inner

Click the graphic to change the join type.

Find Max End Date | Checkpoint-2

Summary of Join Results

Click the bar segments to view the included and excluded values.

Mismatched values

Find Max End Date	Checkpoint-2
PIDM	Enrollment_End
20,190,81	20,190,81
20,190,70	20,190,70
20,201,21	20,201,21
20,181,21	20,181,21
20,190,81	20,190,81
20,240,33	20,240,33
20,210,81	20,210,81
20,210,33	20,210,33
20,190,62	20,190,62
20,181,21	20,181,21

RemoveDuplicate 35 fields | 30 rows

Filter Values... | Identify Duplicate Rows | Rename Fields... | Create Calculated Field...

Changes (2)

Calculated Field

Is Duplicate Row?

PARITY([UniqueID], [First_Name], [MID], [Last_Name], [Name_Suffix], [PIDM-1], [PIDM-2], [PIDM], [Record_Found])

Filter: Selected Values

Keep only "Unique"

Z_Term	Is Duplicate R...	UniqueID	First_Name
20185	Unique		AARON
			ABBEY
			ABIGAIL
			ABDULHAI
			ABEL
			ABELLARD O
			ABIGAIL
			ABRAHAM
			ADRYNA
			ADAM
			ADDISON
			ADELA

PREPARATION AND CLEANUP FOR NSCH DATA

Prep for Graduated Records:

- Filter for Graduated Records (Graduated = Y).
- Create calculated fields for **Start_Date** and **End_Date** (based on **Graduation_Date**).
- Remove Duplicate Records.

The screenshot displays a data pipeline with the following steps:

- JOIN NSCH and... (Join back NSCH with Maximum End Date records)
- MinBegin_Max... (NSCH with records having the oldest (min) Begin date and newest (max) End)
- Cleanup before...
- Remove Duplic... (To remove duplicate records)
- Union 6

The 'Start_End Dates' step is highlighted with a red box. Below the pipeline, the 'Changes (2)' panel shows the definitions for the calculated fields:

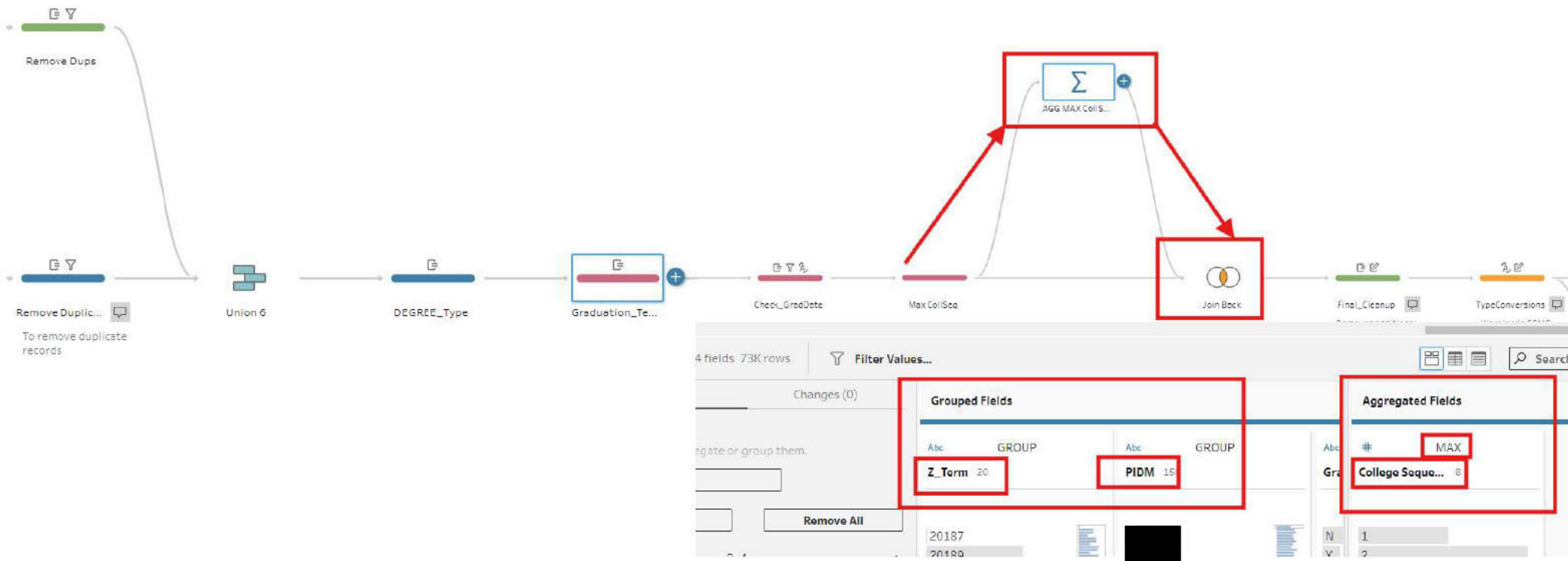
- Calculated Field **End_Date**: IF RIGHT(LEFT([Graduation_Date], 6), 2) = '08' OR
- Calculated Field **Start_Date**: IF RIGHT(LEFT([Graduation_Date], 6), 2) = '08' OR

The main data view shows the following columns and sample data:

Start_Date	End_Date	Z_Term
20180801	20181231	20189
20190101	20190531	20191
20190601	20190731	20197
20190801	20191231	20199
20200101	20200531	20201
20200601	20200731	20207
20200801	20201231	20209

COMBINING AND CLEANUP FOR NSCH DATA

- **Union Steps:** Combine NSCH Graduated and Not Graduated Records.
- **Create Calculated Fields:**
 - Degree_Type (from Degree_Title).
 - Graduation_Term (from Graduation_Date).
 - Check_GraduationDate (validations: Graduated=N, Y, etc.).
 - Aggregate maximum College Sequence by Z_Term & PIDM.



SQL SERVER STEPS

- Append new term data to '**NSCH_all_terms_cleaned**'. (From Tableau Prep to the Database)
- Sort NSCH Term data by key attributes (State, 2/4 yr., Public/Private, Graduated) into a '**NSCH_all_terms_ordered**'.
- Insert data into **Retention_NSCH**.
- Run updates for new term data.
- Validation and investigation queries.

DATABASE OBJECTS OF THE PROJECT

Validate record counts across key tables:

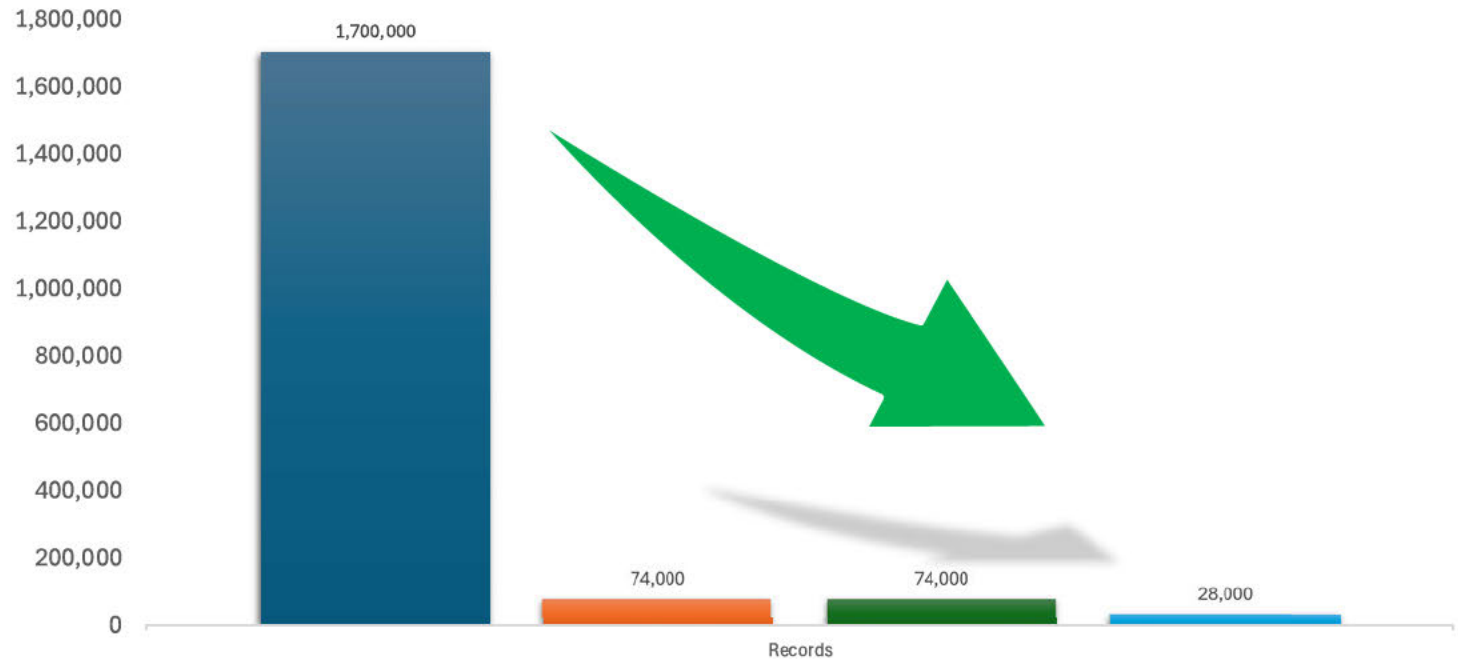
- Retention_final.
- NSCH_return_uncleaned_all_terms.
- NSCH_all_terms_cleaned.
- NSCH_all_terms_ordered.
- Retention_NSCH.
- Investigate issues using dedicated queries.



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DATABASE DEVELOPMENT & UPDATES

NSCH – Database Development



Key Database objects:

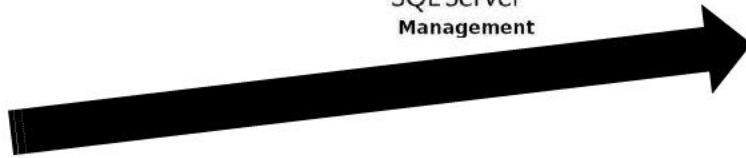
Retention_final	
NSCH_return_uncleaned_all_terms	1,700,000
NSCH_all_terms_cleaned	74,000
NSCH_all_terms_ordered	74,000
Retention_NSCH	28,000



NSCH – DB Object Schema

dbo.retention final

Column Name
PIDM
Banner_ID
Cohort_Term
Cohort_Type
Term_1



dbo.Retention_NSCH

Column Name
PIDM
Banner_ID
Cohort_Term
Cohort_Type
Term_1
Term_1_in_TAMUCC
Term_1_ClassLvl
Term_1_SCHL_Code
Term_1_SCHL_Name
Term_1_SCHL_State
[Term_1_SCHL_2/4]
[Term_1_SCHL_Pub/Priv]
Term_1_SCHL_Major
Term_1_SCHL_CIP
Term_1_Grad
Term_1_DEG_Type
Term_1_DEG_Major
Term_1_DEG_CIP
...
Term_24
Term_24_in_TAMUCC
Term_24_ClassLvl
Term_24_SCHL_Code

NSCH – DB Overview

dbo.NSCH_return_uncleaned_all_terms

Column Name
Z_Term
File_Z_Term
[Your Unique Identifier]
First_Name
Middle_Initial
Last_Name
NameSuffix
PIDM
[Record Found Y/N]
Search_Date
College_Code_Branch
College_Name
College_State
[2_4_year]
Public_Private
Enrollment_Begin
Enrollment_End
Enrollment_Status
[Class Level]
[Enrollment Major 1]
[Enrollment CIP 1]
[Enrollment Major 2]
[Enrollment CIP 2]
Graduated
Graduation_Date
[Degree Title]
[Degree Major 1]
[Degree CIP 1]
[Degree Major 2]
[Degree CIP 2]
[Degree Major 3]
[Degree CIP 3]
[Degree Major 4]
[Degree CIP 4]
[College Sequence]

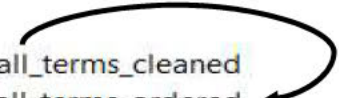
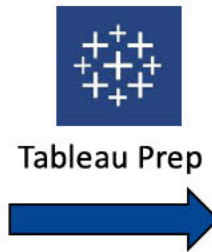
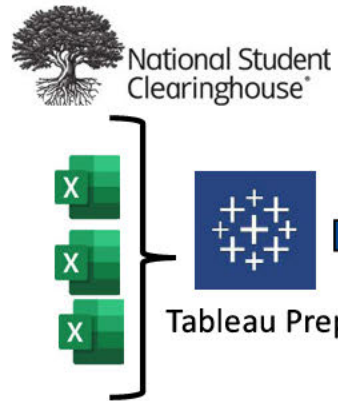
dbo.NSCH_all_terms_cleaned
 dbo.NSCH_all_terms_ordered

Column Name
Z_Term
[Your Unique Identifier]
First_Name
Middle_Initial
Last_Name
NameSuffix
PIDM
[Record Found Y/N]
Search_Date
College_Code_Branch
College_Name
College_State
[2_4_year]
Public_Private
Enrollment_Status
Class_Level
[Enrollment Major 1]
[Enrollment CIP 1]
[Enrollment Major 2]
[Enrollment CIP 2]
Graduated
Graduation_Date
[Degree Title]
[Degree Major 1]
[Degree CIP 1]
[Degree Major 2]
[Degree CIP 2]
[Degree Major 3]
[Degree CIP 3]
[Degree Major 4]
[Degree CIP 4]
College_Sequence
Enrollment_Begin
Enrollment_End



dbo.Retention_NSCH

Column Name
PIDM
Banner_ID
Cohort_Term
Cohort_Type
Term_1
Term_1_in_TAMUCC
Term_1_ClassLvl
Term_1_SCHL_Code
Term_1_SCHL_Name
Term_1_SCHL_State
[Term_1_SCHL_2/4]
[Term_1_SCHL_Pub/Priv]
Term_1_SCHL_Major
Term_1_SCHL_CIP
Term_1_Grad
Term_1_DEG_Type
Term_1_DEG_Major
Term_1_DEG_CIP
...
Term_24
Term_24_in_TAMUCC
Term_24_ClassLvl
Term_24_SCHL_Code



NSCH – Database Updates

Sorting NSCH_all_terms_cleaned to NSCH_all_terms_ordered, to populate Retention_NSCH with appropriate records!

dbo.NSCH_all_terms_cleaned



```
ORDER BY
z_term,
CASE
WHEN nsch_all.College_State = 'TX' THEN
CASE
WHEN nsch_all.[2_4_year]='4' AND nsch_all.[Public_Private]='Public' THEN 1
WHEN nsch_all.[2_4_year]='4' AND nsch_all.[Public_Private]='Private' THEN 2
WHEN nsch_all.[2_4_year]='2' AND nsch_all.[Public_Private]='Public' THEN 3
WHEN nsch_all.[2_4_year]='2' AND nsch_all.[Public_Private]='Private' THEN 4
END
WHEN nsch_all.[2_4_year]='4' AND nsch_all.[Public_Private]='Public' THEN
CASE
WHEN nsch_all.College_State = 'LA' THEN 5
WHEN nsch_all.College_State = 'AR' THEN 6
WHEN nsch_all.College_State = 'OK' THEN 7
WHEN nsch_all.College_State = 'NH' THEN 8
ELSE 9
END
WHEN nsch_all.[2_4_year]='4' AND nsch_all.[Public_Private]='Private' THEN
CASE
WHEN nsch_all.College_State = 'LA' THEN 10
WHEN nsch_all.College_State = 'AR' THEN 11
WHEN nsch_all.College_State = 'OK' THEN 12
WHEN nsch_all.College_State = 'NH' THEN 13
ELSE 14
END
WHEN nsch_all.[2_4_year]='2' AND nsch_all.[Public_Private]='Public' THEN
CASE
WHEN nsch_all.College_State = 'LA' THEN 15
WHEN nsch_all.College_State = 'AR' THEN 16
WHEN nsch_all.College_State = 'OK' THEN 17
WHEN nsch_all.College_State = 'NH' THEN 18
ELSE 19
END
WHEN nsch_all.[2_4_year]='2' AND nsch_all.[Public_Private]='Private' THEN
CASE
WHEN nsch_all.College_State = 'LA' THEN 20
WHEN nsch_all.College_State = 'AR' THEN 21
WHEN nsch_all.College_State = 'OK' THEN 22
WHEN nsch_all.College_State = 'NH' THEN 23
ELSE 24
END
END
College_State;
```

dbo.NSCH_all_terms_ordered

Dynamic SQL – for Data Loading and Updates in Retention_NSCH

How Dynamic SQL Streamlines Updates:

- Dynamically generates queries for each term (Term_1 to Term_24).
- Reduces manual effort and saves time.
- Ensures consistency & accuracy across all terms.

Conditional Logic:

- Uses CASE statements for relevant updates.
- Updates fields based on enrollment status (Graduated/Not Graduated).
- Ensures only necessary data is updated.

```
1 DECLARE @termNum INT = 1;
2 DECLARE @sql NVARCHAR(MAX);
3
4 WHILE @termNum <= 24
5 BEGIN
6     SET @sql = '
7         UPDATE nsch
8         SET
9             -- Update the corresponding term columns (Term_1, Term_2, etc.)
10            Term_' + CAST(@termNum AS NVARCHAR(2)) + '_ClassLvl = nsch_all_ordered.[Class Level],
11            Term_' + CAST(@termNum AS NVARCHAR(2)) + '_SCHL_Code = nsch_all_ordered.College_Code_Branch,
12            -- Additional fields for each term, using Dynamic SQL to address different terms
13            Term_' + CAST(@termNum AS NVARCHAR(2)) + '_Grad = CASE
14                WHEN nsch_all_ordered.Graduated = ''Y''
15                    AND nsch_all_ordered.Graduation_Term = nsch_all_ordered.Z_Term
16                THEN nsch_all_ordered.Graduated
17                ELSE NULL
18            END
19            -- Repeat similar logic for other fields like DEG_Type, DEG_Major, etc.
20        FROM Retention.dbo.Retention_NSCH_new nsch
21        JOIN Retention.dbo.newer_NSCH_all_terms_ordered nsch_all_ordered
22            ON nsch.PIDM = nsch_all_ordered.PIDM
23            AND nsch_all_ordered.Z_Term = nsch.Z_Term
24        WHERE nsch_all_ordered.Z_Term = ' + CAST(@termNum AS NVARCHAR(2)) + ';
25
26    EXEC sp_executesql @sql;
27
28    SET @termNum = @termNum + 1;
29 END;
30
```

Validation across NSCH database objects

TotalNonNullTermValues_in_Retention_NSCH (31,635):

- Represents non-null term values across all terms in Retention_NSCH.
- Ideally matches TotalCount_WITHOUT_Z_term_Duplicates.

TotalCount_WITHOUT_Z_term_Duplicates (31,635):

- Counts distinct records, excluding duplicates based on Z_term.
- Should match the TotalNonNullTermValues_in_Retention_NSCH count.

TotalCount_with_Z_term_Duplicates (34,295):

- Includes duplicates where some PIDMs have multiple records for the same Z_term.
- Duplicates are handled via a priority sorting process before loading into Retention_NSCH.

Data Loading Based on Sorting:

- The sorting ensures only the most relevant record per PIDM is loaded, preserving data integrity.

TotalNonNullTermValues_in_Retention_NSCH	31635
TotalCount_WITHOUT_Z_term_Duplicates	31635
TotalCount_with_Z_term_Duplicates	34295
TotalCount_with_Z_term_Duplicates	34295

NEXT STEPS

Ongoing validation

- Continue to validate data integrity after each update cycle.
- Ensure consistency across all terms and detect any anomalies.

Automation

- Further automate the data update and validation processes using Dynamic SQL & Stored Procedures.
- Explore additional tools for enhanced automation efficiency.

Refinement of the process

- Continuously improve the data cleanup and transformation steps to ensure the highest data quality.



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DATA VALIDATION

NSCH – Data Validation

- Verify Cohort Loaded
- Create 6 Categories by Year
 - Graduated TAMUCC
 - Retain TAMUCC
 - Graduated Elsewhere
 - Retained Elsewhere
 - Stop-Out
 - Hasn't Occurred

*4_Status ▾	*7_Status ▾	*10_Status ▾	*13_Status ▾	*16_Status ▾	*19_Status ▾	*21_Status ▾	*24_Status ▾
Stop-Out	Stop-Out	Stop-Out	Hasn't Occurred	Hasn't Occurred	Hasn't Occurred	Hasn't Occurred	Hasn't Occurred
Retain TAMUCC	Retain TAMUCC	Retain TAMUCC	Hasn't Occurred	Hasn't Occurred	Hasn't Occurred	Hasn't Occurred	Hasn't Occurred
Retain TAMUCC	Grad TAMUCC	Grad TAMUCC	Grad TAMUCC	Grad TAMUCC	Grad TAMUCC	Grad TAMUCC	Grad TAMUCC
Retain TAMUCC	Stop-Out	Stop-Out	Hasn't Occurred	Hasn't Occurred	Hasn't Occurred	Hasn't Occurred	Hasn't Occurred
Retain TAMUCC	Retain TAMUCC	Retain TAMUCC	Hasn't Occurred	Hasn't Occurred	Hasn't Occurred	Hasn't Occurred	Hasn't Occurred
Retain TAMUCC	Retain Elsewhere	Stop-Out	Hasn't Occurred	Hasn't Occurred	Hasn't Occurred	Hasn't Occurred	Hasn't Occurred
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Retain TAMUCC	Grad TAMUCC	Grad TAMUCC	Grad TAMUCC	Grad TAMUCC	Grad TAMUCC	Grad TAMUCC	Grad TAMUCC



NSCH – Data Validation

Retention and Graduation Rates

Cohort Term Fall 2021			Student Class Level All			Cohort Type All			Entering College All																																																																													
PSA Status All			Race/Ethnicity All			First-Generation All			Full-Time/Part-Time All																																																																													
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NSCH – Data Validation

Retain 1st Year Other University	# Students
TEXAS A&M UNIVERSITY	154
DEL MAR COLLEGE	49
TEXAS STATE UNIVERSITY - SAN MARCOS	20
BLINN COLLEGE- BRYAN CAMPUS	17
AUSTIN COMMUNITY COLLEGE DISTRICT	15
UNIVERSITY OF TEXAS - SAN ANTONIO	14
COMMUNICATION	2
KINESIOLOGY	2
PSYCHOLOGY	2
ARCH CONSTRUCTION STUDIES	1
BIOLOGY	1
BUSINESS ANALYTICS	1
CYBER SECURITY	1
ENVIRONMENTAL SCIENCE	1
EQUITY AND EDUCATION	1
MARKETING	1
MEDICAL HUMANITIES	1
UNIVERSITY OF HOUSTON	11
UNIVERSITY OF TEXAS RIO GRANDE VALLEY	8
LONE STAR COLLEGE SYSTEM DISTRICT	7
SAM HOUSTON STATE UNIVERSITY	7
SAN ANTONIO COLLEGE	7
TEXAS TECH UNIVERSITY LUBBOCK	7
COASTAL BEND COLLEGE	6
TARRANT COUNTY COLLEGE	6
TEXAS A&M UNIVERSITY - KINGSVILLE	6
NORTHWEST VISTA COLLEGE	5
PALO ALTO COLLEGE	5
TEXAS A&M UNIVERSITY- SAN ANTONIO	5
TEMPLE COLLEGE	4
UNIVERSITY OF NORTH TEXAS	4
COLLIN COUNTY COMMUNITY COLLEGE	3
TEXAS STATE TECHNICAL COLLEGE- HARLINGEN	3
Total	461

2nd Year Retain Other University	# Students
TEXAS A&M UNIVERSITY	167
DEL MAR COLLEGE	68
TEXAS STATE UNIVERSITY - SAN MARCOS	24
UNIVERSITY OF TEXAS - SAN ANTONIO	24
KINESIOLOGY	3
PSYCHOLOGY	3
COMMUNICATION	2
MEDICAL HUMANITIES	2
	1
ACCOUNTING	1
ARCH CONSTRUCTION STUDIES	1
BUSINESS ANALYTICS	1
CHEMICAL ENGINEERING	1
CHEMISTRY	1
CYBER SECURITY	1
ENGLISH	1
ENVIRONMENTAL SCIENCE	1
FINANCE	1
INFORMATION SYSTEMS	1
MARKETING	1
MECHANICAL ENGINEERING	1
MULTIDISCIPLINARY SCIENCE	1
AUSTIN COMMUNITY COLLEGE DISTRICT	17
TEXAS A&M UNIVERSITY - KINGSVILLE	16
SAN ANTONIO COLLEGE	11
UNIVERSITY OF HOUSTON	11
TEXAS TECH UNIVERSITY LUBBOCK	10
UNIVERSITY OF NORTH TEXAS	10
UNIVERSITY OF TEXAS RIO GRANDE VALLEY	10
LONE STAR COLLEGE SYSTEM DISTRICT	8
SAM HOUSTON STATE UNIVERSITY	8
BLINN COLLEGE- BRYAN CAMPUS	7
COASTAL BEND COLLEGE	6
Total	571





7

REFLECTION & NEXT STEPS

Challenges Faced

- Getting familiar with NSCH data.
- Amount of data starting with. N = 1.7M
- Creating crosswalks for various NSCH variables such as Degree Type, CIP code, etc.
- Deciding on the logic to determine which records to choose

Benefits

- A comprehensive database of subsequent enrollment & degree completion
- Clean, organized, and structured "census" data for ongoing data analysis
- Helping interpret student enrollment and transfer-out patterns
- Understanding the students' academic journey.

NEXT STEPS

- Establish process and timing of updating the database
- Create data visualizations to help analyze and share data findings
- In-depth research analysis on our transfer-out students





Q&A

THANK YOU!

Whitney Kessinger
Director of Planning & Institutional Research
whitney.kessinger@tamucc.edu

Jiashi Zhao, EDD
Lead Data Analyst-Analytics
Jiashi.zhao@tamucc.edu

Nicholas Ullrich
Lead Research Data Analyst
nicholas.ullrich@tamucc.edu

Farazuddin Mohammed
Graduate Assistant - Research
fmohammed7@islander.tamucc.edu

Scan the QR code to
complete the session
survey.



Texas Association for Institutional Research

Annual Conference: February 25-28, 2025
Omni Hotel in Corpus Christi, TX

