College, Career and Military Readiness

An Open Source Tracking & Monitoring Project

Pre-publication copy, Updated final copy to be released Mar 1, 2026
Last Update: November 6, 2025

Contents

Problem of Practice

Although Texas public schools are required to track College, Career, and Military Readiness (CCMR) indicators as part of state accountability, districts currently face significant challenges in consistently collecting, monitoring, and analyzing this data across campuses. Data is housed in multiple, disconnected systems (e.g., assessment vendors, career certification providers, military recruitment reports, and internal student information systems), leading to delays, inaccuracies, and gaps in reporting.

As a result, campus and district leaders lack real-time, actionable insights into which students are on track to meet CCMR benchmarks, which interventions are most effective, and where equity gaps persist among student subgroups. This limits district leaders, community partners, researchers, and policymakers' ability to provide timely support, risks underreporting student successes, and ultimately impacts state accountability ratings and student postsecondary outcomes.

District needs for CCMR support can be organized into two general categories:

(1) There is a need for a more systematic approach to CCMR

- Many campuses track CCMR locally, and formats may even vary across campuses. Reducing or eliminating manual entry or report building by campus leaders will significantly reduce work hours spent on this task.
- Not all districts use a third-party vendor to track or upload data to PEIMS. Accessible tools will help improve reporting accuracy.
- Fiscal constraints are often a barrier to proactive district leaders. Offering open source tools will help provide needed support, especially for small, rural districts.

(2) There is a need for a systematic, transparent, and sustainable process for tracking, monitoring, and reporting CCMR progress that ensures:

- Data accuracy and alignment with Texas Education Agency (TEA) accountability standards.
- Early identification of students at risk of not meeting readiness indicators
- Timely interventions tailored to students' chosen pathways (college, career, or military)
- Equitable monitoring across all student groups to close readiness gaps

Without such a system, districts cannot ensure that their students are best prepared for success after graduation or that they are accurately reflecting student achievements and successes in accountability measures or in their communities.

Accountability Overview

Domain 1 – Student Achievement: CCMR Component

- 40% STAAR Performance (40%)
- 20% CCMR Readiness (40%)
- 20% Graduation Rate (20%)

How is CCMR Readiness Calculated?
Rounded to the nearest whole number:

$$\text{CCMR Rate} = \frac{Graduates\ meeting \geq 1\ CCMR\ indicator}{Total\ graduates\ in\ cohort}$$

Who Counts in the numerator for CCMR?
Accountability for CCMR is based on the prior year graduating cohort. For example, accountability ratings for SY 2024-2025 use the 2024 graduate cohort to calculate their CCMR ratings. A graduate contributes to a campus/district accountability rating if they meet **any one** of the CCMR criteria:

- *College Ready*
  - Meet TSI criteria via SAT, ACT, or TSIA2
  - Successfully complete a college prep course in math or ELA
- *Career Ready*
  - Earn an industry-based certification (IBC) on the TEA-approved list
  - Earn a Level I or Level II certificate (minimum 15–51 semester credit hours)
  - Complete a CTE coherent sequence with an aligned IBC (earns ½ point if no other indicator is met.
- *Military Ready*
  - Enlist in the U.S. Armed Forces (documented in TEA's enlistment files)
- *Other Recognized Indicators*
  - Complete an OnRamps dual enrollment course
  - Earn credit in dual credit courses (9+ hours in ELA/math, or 12+ in any subject)
  - Graduate under a special education advanced diploma plan + earn a qualifying workforce readiness indicator.

Who Counts in the CCMR Denominator

- The denominator is the annual graduate cohort for the prior school year. For example, SY 2024-2025 accountability will use the 2024 graduate cohort.
- Certain students (e.g., those who recently arrived in Texas) may be excluded.

Detailed Example

- **Bluebonnet ISD**
  - *Total graduates (denominator): 365*
  - *Numerator*
    - Graduates meeting **TSI criteria:** 150
    - Graduates earning an **IBC:** 38
    - Graduates with **dual credit hours (≥12 hrs):** 12
    - Graduates completing only a **CTE coherent sequence (½ point each):** 16

Step 1. Count Full Credit Students
150 (TSI) + 38 (IBC) + 12 (dual credit) = 200 full-credit students

Step 2. Add Half-Point Students
16 students × 0.5 = 8 CCMR credits

Step 3. Total Numerator
200 + 8 = 208 graduates with CCMR credit

Step 4. Divide
208 ÷ 365 = 0.570 (57.0%)

Step 5. Round
57% CCMR Rate

That 57% becomes the CCMR component score inside Domain 1. TEA then converts that to a scaled score (0–100) before combining it with STAAR and graduation rates.

Technical Notes

- *Half-point CCMR* (CTE coherent sequence only). Only applies when no other indicator is met.
- *Military enlistment*. TEA now verifies using federal data; districts no longer self-report.
- *Small-number rules* (minimum denominators) apply if a campus has very few graduates.
- *Rounding* is done at the end of the calculation, not for partial steps.

Summary of Common CCMR Tools		
Platform	**Focus Area**	**Notable Strengths**
CareerCraft	Texas CCMR tracking (real-time, district level)	Accountability-ready data centralization, governance, projections
SchooLinks	Tx CCMR + Personalized Planning	Integrated graduation/GPR planning and real-time updates
CCMR Insights (ESC 10)	Real-time predictive CCMR dashboards	Ed-Fi standards, proactive support, forecasts readiness + funding
Naviance (PowerSchool)	College and career planning (national)	Widely adopted, rich counseling and readiness tools
OnDataSuite	District analytics and CCMR integration	TEA comparison, supplemental data, early warning systems

Summary of Platform Weaknesses					
Platform	**Integration Gaps**	**Cost/Value Concerns**	**Training & Adoption**	**TEA Alignment Updates**	**Other Weaknesses**
CareerCraft	May not integrate fully with SIS or counseling systems	Pricing not transparent, possibly high for small districts	Moderate – tailored for CCMR but still requires training	Fairly aligned, but narrow CCMR focus may miss broader context	Niche tool: smaller user community, less peer support
SchooLinks	Needs customization for Texas CCMR; better at planning than accountability	Licensing can be a significant cost	Reported learning curve for counselors/staff	Updates may lag TEA changes if not prioritized	Focus is more student-facing, less robust for CCMR compliance
CCMR Insights	May duplicate existing district tools (ODS, SIS add-ons)	Emerging platform—value still being proven	Still building training/documentation	Less established, updates depend on vendor maturity	Narrow scope: more of a dashboard than full CCMR ecosystem
Naviance	Not Texas CCMR-specific, requires supplements for accountability	Often cited as expensive	Interface & feature overload can overwhelm staff	Slower to adapt to state-specific rules (national focus)	Outdated interface, declining user satisfaction
OnDataSuite	Requires manual uploads for IBCs, some assessments	Subscription is broad, not CCMR-specific	Steep learning curve; power-user tool	Generally updated but reactive to TEA files	Descriptive only—no built-in intervention strategies

Summary of Platform Strengths					
Platform / Vendor	**Integration Capabilities**	**TEA Accountability Alignment**	**Student-Facing Features**	**Data Insights & Reporting**	**Other Strengths**
CareerCraft	Centralizes data from multiple CCMR sources in one platform	Built specifically for Texas CCMR standards (Indicators, A–F ratings, HB3 Outcomes Bonus)	Limited (not a counseling platform, but provides student-level readiness profiles)	Real-time dashboards by cohort/grade, evidence uploads, compliance-ready reports	Streamlined for CCMR, strong governance features, supports documentation for audits
SchooLinks	Integrates with SIS and PGP planning tools; pulls some CCMR-related data	Can track CCMR indicators, but stronger in graduation plan alignment	Student portals, 4-year planning, endorsements, career inventories	Visual dashboards, progress monitoring toward goals, counselor tools	Modern UI, flexible customization, statewide adoption in Texas growing quickly
CCMR Insights	Built on Ed-Fi interoperability. Connects SIS, testing, and college/career data	Designed to forecast CCMR accountability & funding outcomes	Students don't interact, but staff can act on insights	Predictive analytics (readiness, outcomes bonus), subgroup gap analysis, accountability simulations	Supported through ESC partnerships, strong alignment to TEA's data definitions
Naviance	Integrates with SIS, college apps (Common App), FAFSA tools	Not CCMR-specific, but supports readiness indicators indirectly	Career assessments, college match, goal setting, course planning	National benchmarking, longitudinal student plans, counselor case management	Widely used brand, extensive resources, strong counselor adoption in many districts

OnDataSuite	Robust imports: PEIMS, TSDS, TEA CCMR Tracker/Verifier, local uploads	Directly aligns with TEA files, lets districts preview accountability	None (staff-facing only)	Strong descriptive analytics, comparisons across campuses, subgroup filters	Flexibility to track more than CCMR (attendance, finance, assessments, etc.); enterprise analytics tool

LONESTARP3 CCMR Stakeholder Input Roadmap

New Design Elements

- Survey development and validation
- District respondent recruitment
- Platform evaluation and comparison
- LONESTA**RP3** website hosting and feedback solicitation
- Stakeholder engagement

Phase 1: Needs Assessment and Survey Development		
Milestone 1.1: Literature Review		
	Description	Directly Responsible Individual (DRI)
Objective	Document existing CCMR platforms	Lane Sobehrad, Lubbock ISD
Key Activities	• Systematic review of existing CCMR tracking platforms • Analysis of TEA resources and district reporting requirements • Documentation of platform features	Lane Sobehrad, Lubbock ISD
Deliverable	Landscape Report with platform comparison matrix	Lane Sobehrad, Lubbock ISD
Milestone 1.2: Survey Instrument Development		
	Description	DRI
Objective	Create valid, reliable survey instruments for district needs assessment	
Key Activities	• Develop initial item pool based on literature review and TEA accountability framework • Conduct cognitive interviews with 5-8 district administrators • Pilot test with 15-20 districts not in target sample • Calculate reliability statistics (Cronbach's alpha ≥ 0.70 for	

	subscales) ● Establish content validity through expert review (min. 3 experts)	
Deliverable	Validated survey instrument with reliability/validity documentation	
Milestone 1.3: Respondent Recruitment Strategy		
	Description	DRI
Objective	Recruit representative sample of Texas school districts	
Key Activities	● Define target population (districts <3,000 students, rural designation, etc.) ● Calculate required sample size for adequate statistical power ● Develop stratified sampling frame by region, size, and CCMR performance ● Partner with ESCs for recruitment support	
Deliverable	Recruitment protocol and confirmed sample frame	
Phase 2: Data Collection and Platform Evaluation		
Milestone 2.1: Primary Survey Administration		
	Description	DRI
Objective	Gather stakeholder feedback from at least 100 district leaders	
Key Activities	● Launch survey via LONESTA**RP3** website and direct outreach ● Achieve a minimum 60% response rate through multiple touchpoints ● Conduct data quality checks (completion time, response consistency)	
Deliverable	Complete dataset with ≥100 districts	
Milestone 2.2: Stakeholder Interviews / Focus Groups		

	Description	DRI
Objective	Gather qualitative insights to contextualize findings	
Key Activities	• Conduct semi-structured interviews with 15-20 district leaders • Use purposive sampling to ensure diverse perspectives • Record, transcribe, and code interviews using thematic analysis	
Deliverable	Qualitative analysis report with key themes	
Phase 3: Analysis, Synthesis, and Dissemination		
Milestone 3.1: Integrated Data Analysis		
	Description	DRI
Objective	Synthesize quantitative and qualitative findings	
Key Activities	• Conduction descriptive and inferential statistical analyses • Map district needs to existing platform features (gap analysis) • Calculate effect sizes for key differences between district subgroups	
Deliverable	Comprehensive Analysis Report with visual data displays	
Milestone 3.2: Evidence-Based Recommendations		
	Description	DRI
Objective	Create actionable recommendations based on triangulated evidence	
Key Activities	• Identify high-priority needs not met by editing platforms • Developed tiered recommendation framework (short-/medium-/long-term)	

	• Create logic model connecting recommendation to intended outcomes	
Deliverable	Evidence-based recommendations report with implementation roadmap.	
Success Metrics		
Process Metrics		
• Survey sample size ≥100 districts • Survey instrument reliability (α ≥0.70)[1] • Interview sample size ≥15		
Outcome Metrics		
• Comprehensive gap analysis comparing needs to existing solutions • Evidence-based recommendations validated by stakeholders • Website traffic increases, indicating external use of products • Feedback to LONESTA**RP3** that recommendations resulted in district action		

[1] Cronbach's alpha (α) is calculated as: $\alpha = (k/(k-1)) \times (1 - \Sigma\sigma^2_i/\sigma^2\square)$. https://doi.org/10.1007/BF02310555

LONESTARP3 CCMR Data Analysis Roadmap

Design Elements

- Open Access tool for K-12 entities seeking additional CCMR insight
- Targeted at small school districts (< 3,000 students) and/or rural school district who may not have capacity to hire dedicated technology or IT professionals.

Phase 1: Minimum Viable Product (MVP)	
Milestone 1.1: Upload Center	
	Description
Objective	Get campus leaders a quick, accurate picture of who's CCMR-ready and who's not.
Key Activities	● Test upload of common CCMR file formats. May include ○ TEA CCMR Tracker ○ STAAR ○ TIA/TSIA2 ○ SAT/ACT ○ IBC certification files ○ Dual credit course lists ● Test data validation features. May include ○ Flagging invalid Course Codes ○ Conflicting assessment scores ○ LONESTA**RP3** Crosswalk
Deliverable	Open source upload tool built in RStudio accepts CSV and Excel file formats.
Milestone 1.2: Student Matching Tool	
	Description
Objective	Match unique student / campus identifiers across varying CCMR file formats.
Key Activities	● Test matching feature to map unique student IDs across applicable CCMR files ● Test aggregate feature to summarize campus-level demographic profiles
Deliverable	Open source tool provides accurate error reporting for conflicting student / campus data.

Milestone 1.3: Student Matching Tool	
	Description
Objective	Match unique student / campus identifiers across varying CCMR file formats.
Kay Activities	• Test CCMR A-F score estimation • Test HB 3 Outcome Bonus tracker • Validate subpopulation disaggregation feature (e.g. Eco Dis, SPED) • Develop feature to provide a list of students not year CCMR qualified.
Deliverable	Open source tool provides a campus-level dashboard with relevant CCMR information.
Milestone 1.4: Student Matching Tool	
	Description
Objective	Match unique student / campus identifiers across varying CCMR file formats.
Kay Activities	• Test CCMR A-F score estimation • Test HB 3 Outcome Bonus tracker • Validate subpopulation disaggregation feature (e.g. Eco Dis, SPED) • Develop feature to provide a list of students not year CCMR qualified.
Deliverable	Open source tool provides a campus-level dashboard with relevant CCMR information.

- **Downloadable Reports**
  - Export-ready Excel/CSV for counselors/administrators.
  - Auto-generated “Campus CCMR Snapshot” for leadership meetings.

Phase 2: Enhancements (nice-to-have but high impact)

- **Pathway Tracking**
  - Visualize CCMR readiness pathways.
  - Identify students at risk early (e.g., passed Algebra I but missing TSI English).

- **Historical Trends**
  - Compare CCMR readiness year-over-year by campus and subgroup.
  - Track graduates vs. juniors vs. sophomores in pipeline view.

- **Intervention Tracker**
  - Allow counselors to log interventions (e.g., test retake scheduled, IBC exam pending).
  - Color-coded progress dashboard.

- **Data Validation**
  - Warnings when data uploads don't meet TEA formatting (e.g., missing TSDS ID).
  - Duplicate student flagging across campuses.

Phase 3: Future Features

- **Automated TEA Alignment**
  - Built-in calculations that mimic Domain 1 CCMR formula and Domain 3 subgroup analysis, so leaders can preview accountability outcomes.

- **Student-Level Dashboards for Counselors**
  - Individual student readiness profiles showing which CCMR indicators have been met.
  - Printable "CCMR Readiness Card" for student conferences.

- **Equity Lens**
  - Built-in subgroup comparisons (e.g., Are economically disadvantaged students on track at the same rate as peers?).
  - Flags gaps for intervention.

- **Open API**
  - Allows districts to connect SIS or local databases directly instead of uploading.
  - Supports automation for tech-savvy districts.

CCMR File Mapping				
File Type	**Source**	**Key Data Fields**	**Purpose / CCMR Contribution**	**Notes**
CCMR Tracker / Verifier	TEA	TSDS Student ID, Grad Year, CCMR Indicator Flags, CTE course completion	Primary source for calculating CCMR rate in Domain 1	Must match TEA formatting; use for campus-wide snapshots
STAAR / EOC Rosters	Local STAAR Data	Student ID, Subject, Level (Approaches/Meets/Masters), STAAR test scores	Identify students who meet college readiness via ELA/Math	Needed to cross-check TSI eligibility
TSIA / SAT / ACT Scores	Testing Vendor / District	Student ID, Test Type, Test Date, Scores	College readiness indicator	Must map to TSIA/ACT/SAT cut scores per TEA CCMR rules
Dual Credit / OnRamps Records	Local SIS / College Partner	Student ID, Course, Credits Earned, Completion Status	College readiness indicator	Credits ≥12 (any subject) or 9+ in ELA/math count
Industry-Based Certifications (IBC)	Vendor / District	Student ID, Certification Name, Completion Date	Career readiness indicator	Use TEA-approved IBC list for validation

Level I / Level II Certificates	Local District / Workforce Partner	Student ID, Certificate Type, Hours	Career readiness indicator	Usually 15–51 semester hours; can be combined with IBCs
CTE Coherent Sequence Completion	Local District / SIS	Student ID, CTE Pathway, Completed Courses	Half-point CCMR if no other indicator met	Must match TEA-approved sequence list
Military Enlistment Verification	TEA / DoD	Student ID, Branch, Enlistment Date	Military readiness indicator	Automatically verified by TEA; districts usually just pull confirmation
Special Education Advanced Diploma Records	SIS / Special Ed	Student ID, Diploma Type, Workforce Readiness Completion	College/career readiness for special ed grads	Only counts if meets TEA advanced diploma criteria

LONESTARP3 CCMR: Framework Sample for R Shiny Application

R Download (Free)
R Studio Download (Free)
Shiny (Free)

```
# Install packages if needed
# install.packages(c("shiny", "dplyr", "readr", "DT"))

library(shiny)
library(dplyr)
library(readr)
library(DT)

ui <- fluidPage(
  titlePanel("OpenCCMR - Campus Dashboard & Domain 1 Calculator"),

  sidebarLayout(
    sidebarPanel(
      fileInput("ccmr_file", "Upload TEA CCMR Tracker CSV", accept = ".csv"),
      fileInput("test_file", "Upload Test Scores CSV (TSIA/SAT/ACT)", accept = ".csv"),
      fileInput("dual_file", "Upload Dual Credit / OnRamps CSV", accept = ".csv"),
      fileInput("ibc_file", "Upload IBC / Certificates CSV", accept = ".csv"),
      numericInput("max_ccmr_score", "Maximum Domain 1 CCMR Score (TEA 0–100 scale)",
value = 100, min = 0, max = 100),
      downloadButton("download_summary", "Download Summary")
    ),

    mainPanel(
      h4("Domain 1 CCMR Rate"),
      textOutput("ccmr_rate"),
      h4("Domain 1 CCMR Accountability Score"),
      textOutput("ccmr_accountability"),
      br(),
      h4("Student-Level CCMR Status"),
      DTOutput("student_table")
    )
  )
)
```

```
server <- function(input, output, session) {

  # Reactive expression to read uploaded files
  uploaded_data <- reactive({
    req(input$ccmr_file)

    # Read TEA CCMR Tracker
    ccmr <- read_csv(input$ccmr_file$datapath)

    # Optional uploads
    test_scores <- if(!is.null(input$test_file)) read_csv(input$test_file$datapath) else NULL
    dual <- if(!is.null(input$dual_file)) read_csv(input$dual_file$datapath) else NULL
    ibc <- if(!is.null(input$ibc_file)) read_csv(input$ibc_file$datapath) else NULL

    list(ccmr = ccmr, test_scores = test_scores, dual = dual, ibc = ibc)
  })

  # Reactive expression to calculate CCMR
  ccmr_results <- reactive({
    data <- uploaded_data()
    ccmr <- data$ccmr

    # Start with TEA CCMR indicator
    ccmr_df <- ccmr %>%
      mutate(
        CCMR_College = ifelse(!is.na(College_Indicator) & College_Indicator == 1, 1, 0),
        CCMR_Career = ifelse(!is.na(Career_Indicator) & Career_Indicator == 1, 1, 0),
        CCMR_Military = ifelse(!is.na(Military_Indicator) & Military_Indicator == 1, 1, 0)
      ) %>%
      rowwise() %>%
      mutate(
        CCMR_Total = CCMR_College + CCMR_Career + CCMR_Military,
        CCMR_Flag = ifelse(CCMR_Total > 0, 1, 0)
      )

    # Add Dual Credit / OnRamps if provided
    if(!is.null(data$dual)){
      dual_ids <- unique(data$dual$Student_ID)
      ccmr_df <- ccmr_df %>%
        mutate(CCMR_Flag = ifelse(Student_ID %in% dual_ids, 1, CCMR_Flag))
```

```
  }

  # Add IBC / Certificate if provided
  if(!is.null(data$ibc)){
    ibc_ids <- unique(data$ibc$Student_ID)
    ccmr_df <- ccmr_df %>%
      mutate(CCMR_Flag = ifelse(Student_ID %in% ibc_ids, 1, CCMR_Flag))
  }

  # Calculate Domain 1 CCMR Rate
  domain1_rate <- round(mean(ccmr_df$CCMR_Flag, na.rm = TRUE) * 100, 1)

  # Calculate Domain 1 CCMR Accountability Score (linear scale 0 to max)
  domain1_score <- round((domain1_rate / 100) * input$max_ccmr_score, 1)

  list(df = ccmr_df, domain1_rate = domain1_rate, domain1_score = domain1_score)
 })

 # Output CCMR Rate
 output$ccmr_rate <- renderText({
  req(ccmr_results())
  paste0("Domain 1 CCMR Rate: ", ccmr_results()$domain1_rate, "%")
 })

 # Output Domain 1 Accountability Score
 output$ccmr_accountability <- renderText({
  req(ccmr_results())
  paste0("Domain 1 CCMR Accountability Score: ", ccmr_results()$domain1_score, " / ",
input$max_ccmr_score)
 })

 # Output Student-Level Table
 output$student_table <- renderDT({
  req(ccmr_results())
  datatable(ccmr_results()$df %>%
              select(Student_ID, CCMR_College, CCMR_Career, CCMR_Military, CCMR_Flag),
            options = list(pageLength = 10))
 })

 # Downloadable summary
```

```
  output$download_summary <- downloadHandler(
    filename = function() {
      paste0("CCMR_Summary_", Sys.Date(), ".csv")
    },
    content = function(file) {
      write_csv(ccmr_results()$df, file)
    }
  )
}

shinyApp(ui, server)
```