

Presentation Script

The Case for Resource Reallocation: A Decade of TXST Library Circulation Trends

Team NAND — ~5 Minutes Total

DAVOS — Opening & Problem Statement

~1 minute

“Hey everyone, we’re Team NAND from the Department of Computer Science. I’m Davos, and with me are Nathan, Aleena, and Nathaly. Our project is called *The Case for Resource Reallocation: A Decade of TXST Library Circulation Trends*.”

“So here’s the big picture — Alkek Library’s total circulation has dropped 58% over the last ten years, from about 152,000 transactions down to 64,000. At the same time, Texas State is pushing toward R1 status and enrollment is approaching 40,000 students. So the question we asked is: does this decline mean students stopped engaging with the library, or did their needs just fundamentally change? And either way — how should the library reallocate its resources?”

NATHAN — Data & Methods

~1 minute

“I’ll walk you through our data and methods. We pulled ten years of TXST Library annual circulation reports — FY14 through FY24 — and merged that with IPEDS enrollment data from NCES to get institutional context. After cleaning and cross-verifying everything against the original workbooks, we engineered a key metric: checkouts per enrolled student, which lets us normalize against enrollment growth so we’re comparing apples to apples.”

“For modeling, we used a quadratic fit on the full ten-year range to capture the overall decline, then a linear fit on just FY21 through 24 to identify where things are stabilizing. And for our recommendations, we built a CAGR-based priority matrix — basically any collection declining faster than negative 10% annually gets flagged for reallocation.”

ALEENA — Results & Key Findings

~1.5 minutes

“So what did we find? A few big things. First — the engagement gap. Even adjusting for enrollment, per-capita checkouts fell from 2.89 to 1.60 between FY19 and FY24. So the decline is real, it’s not just more students diluting the numbers.”

“But here’s where it gets interesting — the technology pivot. Equipment and key checkouts surged with an 18.4% compound annual growth rate from FY21 to 24. That category now makes up 28% of all transactions, up from about 20% in FY20. Laptops are growing too.”

Meanwhile, print and media are steadily declining.”

“On the positive side, we do see stabilization. The recent linear trend shows roughly 370 additional transactions per year, so we’re projecting a baseline of around 63,600 to 64,000 going forward — the freefall is over.”

“And using our CAGR threshold, we identified clear ARC candidates — DVD shelves are declining at negative 24% per year, and Music Library and Juvenile collections are also well below that negative 10% line.”

NATHALY — Findings Framework & Implications

~1.5 minutes

“So pulling all of this together, our findings fall into three action tiers. First — **move to ARC**: DVD shelves, Music Library, and Juvenile collections. These are declining fast and should be relocated off Floors 5 and 6 to free up prime real estate. Second — **monitor**: General Collection, Graphic Novels, and Game Shelves. They’re declining but still generating meaningful volume, so they don’t need immediate action. Third — **invest more**: Equipment, Keys, Laptops, and the Secured Collection. That’s the growth story.”

“The implications are pretty clear. Space-wise, moving those ARC-tier collections opens up room for collaborative and tech-enabled spaces. Budget-wise, equipment lending needs more investment given that 18% growth trajectory. And staffing should start shifting from traditional circulation desk roles toward technical support and equipment management.”

“Basically, as TXST moves toward R1, Alkek doesn’t need to be a storage repository — it should be an innovation hub. And the data supports making that transition now. Thanks — happy to take any questions!”

Team NAND — Davos DeHoyos, Nathan Negera, Aleena Tomy, Nathaly Ingol
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