

Project Charter

PRI to SIP Migration Project

Executive Summary

McLennan Community College (MCC) will migrate from Integrated Services Digital Network (ISDN) Primary Rate Interfaces (PRIs) to 50 concurrent Session Initiation Protocol (SIP) channels provided by CallTower. This transition supports MCC's 2025–2030 Strategic Plan by improving student communication, streamlining processes, and investing in secure, modern campus infrastructure.

The project will ensure reliable communications for faculty and staff with students and the community at large. This effort enables MCC to leverage its existing Cisco Unified Communications Manager (CUCM), the college's Private Branch Exchange (PBX), platform while greatly reducing dependency on outdated legacy technology. The project will be carried out in collaboration with college leadership and departmental stakeholders. Special attention will be placed on ensuring business continuity, number porting for the 1,400 Direct Inward Dial (DID) numbers, and failover planning.

The estimated project cost is **\$91,903.60** spread over 36 months. Monthly fee of \$2423.60 for 36 months, and a onetime port fee of \$4654.00 for 1400 DIDs.

Business Need and Background

Currently MCC relies on two AT&T ISDN PRIs to connect the PBX to the publicly switched telephone network (PSTN). PRIs are legacy technologies that are increasingly costly, limited in scalability, and subject to service decommission timelines. AT&T has begun phasing out PRI services across Texas as part of the industry-wide shift to all-IP telephony. Maintaining PRI lines creates unnecessary expense and operational risk. The college is no longer able to make changes to the ISDN PRIs as of October 15, 2025. MCC has been informed that the ISDN PRIs will be End of Support (EoS) on December 31, 2025. SIP trunking offers MCC several advantages:

- **SIP** reduces recurring monthly carrier costs compared to PRIs, particularly for long-distance and international calls.(SIPTRUNK Team, 2023)
- SIP services over MCC's dual internet connections will provide more resiliency to our telephone system in the event of physical damage to the internet lines.
- **At the** service provider level SIP trunks can failover to alternate data centers or redundant paths in case of outages.(CallTower,n.d.)
- Additional call paths can be provisioned as needed without new physical circuits.
- SIP supports MCC's path toward a cloud based Unified Communication (UC) model, including Microsoft Teams.
- SIP is the industry standard for voice connectivity, ensuring MCC is aligned with modern telecom practices.

By migrating to SIP trunking, MCC aligns with industry standards, reduces IT operational overhead, and ensures a modern, secure, and resilient communication platform that supports faculty, staff, and students.

1. **Service Continuity:** Replace 2 PRIs with 50 concurrent SIP trunks while preserving all 1,400 DIDs.
2. **Elimination of Possible Price Hike:** Texas DIR pricing for our current PRI service expires on December 31, 2025. Historically, when Texas DIR pricing expired for other services, there was a price increase from \$300 per month to \$7000 per month.
3. **Redundancy:** Introduction of multiple service entry paths to campus through our dual internet connections and service provider's datacenter high availability capabilities.(CallTower,n.d.)
4. **Scalability:** Enable flexible expansion for future growth without costly physical circuits.
5. **Vendor Support:** Utilize CallTower's managed SIP trunking service with Cisco CUCM integration.

Strategic Benefits to MCC

Migrating to CallTower Session Initiation Protocol (SIP) trunks aligns with MCC's 2025–2030 Strategic Plan by enhancing communication, improving operational efficiency, and supporting a modern, safe, and dynamic learning environment. Key benefits include:

- Reduced reliance on legacy technologies.
- Cost savings over traditional PRI services.
- Improved resiliency and service availability of telephone services.
- Introduces possibility of integration with Microsoft Teams and other cloud UC platforms.
- Scalable solution supporting enrollment growth and new communication needs.

Project Description and Scope

The project will prioritize migrating from connectivity to the Public Switched Telephone Network (PSTN) to the internet, ensuring the college can place and receive calls.

The project will replace the two existing AT&T PRIs with 50 concurrent call SIP paths provide by CallTower. The current 1400 Direct Inward Dialed (DID) number will be ported from AT&T to CallTower, allowing existing extensions to remain unchanged and ensuring uninterrupted communication with the community, employee and students.

In-Scope Services and Deliverables

- Implementation of 50 concurrent SIP trunks with CallTower.
- Porting of 1,400 DIDs to CallTower.
- CUCM integration with SIP trunks.
- Testing of inbound/outbound calling, E911, and failover.
- Updated call routing plans and documentation.
- Decommissioning of 2 AT&T PRIs.

Out-of-Scope Items

- Replacement of existing Cisco phone hardware.
- Migration of analog devices (fax lines, elevator phones, alarms) — will remain on analog gateways until further modernization.

- Call Center redesign (handled under separate project).
- Service(s) that are incompatible or not modernized will not be included in this project. However, those services will be migrated later.

This is a replacement service implementation; existing trunking service is being retired. The project is part of a broader strategic move to migrate the Unified Communications (UC) to the cloud.

Transition Plan Highlights:

- **Phase 1:** Order SIP trunks and establish CallTower interconnection.
- **Phase 2:** Port DIDs from AT&T to CallTower.
- **Phase 3:** Cutover SIP trunks to production, testing
- **Phase 4:** Decommission PRIs.

Support Plan and Long-Term Ownership

ISS Infrastructure Team will own and manage the CallTower SIP trunks post-deployment.

Support Strategy

- Tier 1 Help Desk general call information and device resets.
- Tier 2 support from the infrastructure team for policy management and advanced troubleshooting.
- Tier 3 support from vendor for more advanced troubleshooting.
- Ongoing training for support staff and documentation updates.

Long-Term Support Strategy

- **Hardware:** Future Unified Communications services will be required to support CallTower SIP trunking.
- **Software:** CallTower SIP operates via cloud infrastructure, minimizing on-prem maintenance.
- **Staffing:** Support needs will be re-evaluated annually based on growth and incident volume.

Project Goals

This project goals, each with measurable success metrics and alignment to MCC's strategic priorities.

Developing resources to improve support systems

- **Goal:** Replace all PRI circuits with SIP trunks by December 31, 2025.
- **Success Metric:** 100% of inbound/outbound voice traffic routed over SIP.
- **Strategic Alignment:** improves support systems by modernizing the telephone system connectivity.
- **Goal:** Port all 1,400 DIDs with no service disruption.
- **Success Metric:** 0% DID loss during porting with minimal disruption to the users during migration.
- **Strategic Alignment:** Improves support systems by maintaining existing published telephone number.

Reduced Physical IT Overhead and Infrastructure Costs

- **Goal:** Achieve cost reduction of ≥5% compared to current AT&T PRI billing.
- **Success Metric:** Long distance and PRI service canceled; cost saving realized.

- **Strategic Alignment:** Investing in campus infrastructure to create and maintain a modern learning environment.
- **Goal:** Establish redundant SIP routing paths to ensure ≥99.99% uptime.
- **Success Metric:** Calls to and from campus rout over both internet connections
- **Strategic Alignment:** Investing in campus infrastructure to create and maintain a safe and dynamic learning environment.

Project Schedule

Implementation Project Schedule using CallTower SIP at McLennan Community College (MCC), aligned with MCC's academic calendar (as published at www.mclennan.edu) and structured to minimize disruption to academic operations. This timeline accounts for holidays, end-of-semester transitions, and staff availability.

Key Considerations & Contingencies

- No changes will be made during
 - Fall 2025 finals week (December 6-12)
 - Winter minimester (December 16-January 2)
 - Week before start of Spring 2026 term (January 5-9)
 - First week of the Spring 2026 term (January 12-17)
- Contingency weeks built into testing and training to allow for staff absences and technical delays.
- Communication plans will be coordinated with campus leadership and public information to ensure awareness before go-live.

PHASE	TIMELINE	FISCAL YEAR	NOTES/ACADEMIC CALENDAR ALIGNMENT
Plan	October	2025	Occurs after Fall Semester starts. Approval required by Administration to proceed.
Procurement	October-November	2025	
Project Design	November	2025	After administration approval, vendor will be engaged to provide project timeline
Pre-migration configurations	November-December	2025	Non-disruptive configuration changes identified during project design will be implemented.
Build SIP Paths and install ADTRAN	November-December	2025	ADTRAN and 50 Concurrent call paths will be established across primary internet service.
Cutover Maintenance and testing	December 20-22	2025	Disruptive porting of original DIDs to vendors SIP trunks implemented, will last only a few hours.

Key Constraint: Must be completed before **December 31, 2025** to align with AT&T PRI retirement and avoid dual billing.

Project Budget

The PRI to SIP project is a firm-fixed-price engagement based on a 36-month subscription model, professional services and hardware. This section provides a breakdown of initial implementation costs and projected post-deployment operations and maintenance (MO&E) costs over a three-year period. It also includes estimates of internal staffing costs (FTE) for support and administration.

Budget Summary – Year 1 Implementation (FY26)

BUDGET ITEM	COST	Details
DID Activation/Port Fee	\$4,654.00	-Company Wide Services
Recurring Cost for DIDs	\$15,624.00	- 1400 DIDs at \$0.31 for 36 months
Recurring Hardware Cost	\$2,300.76	-equipment rental at \$63.91for 36 months
Recurring SIP Cost	\$30,510.00	-50 call paths at \$16.95 for 36 months
E911 Surcharge	\$27,324.00	-1100 DID at \$0.69 for 36 months
Surcharges and Fees	\$11,490.84	-\$319.19 at 36 months
Full-Time Employees (FTEs)	\$39,150.00	ISS Employee cost
Total	\$131,053.60	Total deployment cost

Ongoing Maintenance, Operations, and Equipment (MO&E) – FY27–FY29

First two years are covered in the initial contract with CallTower.

BUDGET ITEM	FY27	FY28	FY29	Details
Hardware/Equipment	\$0	\$0	\$0	No new hardware is expected
Software, Licensing, and Support	\$0	\$0	\$29,083.20	Annual SIP license renewal (based on Year 3 quote, subject to inflation)
Total	\$0	\$0	\$29,083.20	-Total per FY

Project Management and Governance

ROLE	NAME	ORGANIZATION
Executive Sponsor	Johnette McKown	President
Executive Sponsor	Chadwick Eggleston	Vice President of Instruction & Student Engagement
Executive Sponsor	Mark Harmsen	Vice President of Finance & Administration
Executive Sponsor	Laura Wichman	Vice President of Strategic Planning and Enrollment
Project Oversight	Mario Leal	Chief Information and Technology Officer
Project Team (Manager)	Noah M. Daly	Infrastructure Manager
Project Team (Technical Lead)	Lawrence Brooks	Network Specialist
Project Team	Joseph Park	Infrastructure Administrator
Project Team	Daylon Rankin	Server Specialist
Vendor Partner	CallTower	SIP Carrier
Cybersecurity and Online Technology Point of Contact	John Segovia	Cybersecurity and Online Technology Manager
Customer Support Services Point of Contact	David Kuehne	Customer Support Services Manager
Administrative Systems Point of Contact	Vickie Peterson	Administrative Systems Manager

Impact Analysis

The migration of the PRIs to SIP will impact multiple stakeholders, business areas, and technical systems across MCC. These impacts are primarily associated with the enhanced communication capabilities.

Impacted Community Members

Faculty & Staff

- Minimal impact; continued use of existing Cisco phones and extensions.
- Temporary service disruption possible during cutover.

ISS Services

- Must configure CUCM SIP trunks, E911 routing, and redundancy.
- Responsible for testing inbound/outbound and failover.
- Update SOPs for troubleshooting SIP connectivity issues.

Help Desk

- Possible increase in tickets concerning placing calls.
- Educating user on any change in dialing.

Impacted Systems

- Cisco CUCM (primary PBX).
- Cisco Unity (voicemail).
- Cisco Emergency Responder (E911 service)
- Fax lines and alarms (remain on analog gateways).

Assumptions

These assumptions are based on current conditions, stakeholder input, and industry's best practices.

Technical Assumptions

- CallTower SIP trunks are fully compatible with CUCM v15.
- All DIDs can be ported from AT&T without restrictions.
- The college has sufficient internet bandwidth and network capacity to handle for 50 concurrent calls.
- Network configurations, firewall rules, and internal systems will allow traffic required for SIP routing.
- PRI circuits will remain active until successful SIP cutover.

User and Operational Assumptions

- Help Desk staff will complete SIP and routing training prior to general deployment and can manage first-tier support requests.
- Faculty, staff, and student users will be well informed of the migration and will see little difference in telephone usage.
- Sufficient documentation and communications will be prepared for the users to understand the migration.

Vendor and Implementation Assumptions

- The vendor will deliver services in accordance with the Statement of Work (SOW), including project kickoff, configuration, testing, and knowledge transfer.
- All licensing and support services will be delivered on time and without procurement or shipping delays.
- MCC's infrastructure project team will provide timely responses to the vendor and make internal resources (cybersecurity and infrastructure staff) available as scheduled.

Budget and Resource Assumptions

- Funding for initial implementation and two years of maintenance and support is approved and will remain stable.
- Staff time allocated for implementation (e.g., projected FTE time allotments for infrastructure support roles) will be maintained throughout the project.

Constraints

This project has several constraints.

Time Constraints

- PRI decommission deadline (January 1, 2026).
- The DID porting must avoid academic disruption during key periods:
 - Fall finals (December 6, 8-11, 2025)
 - Spring semester start-up (January 5- 16, 2026)
 - Holiday periods must be considered in scheduling training and testing.

Resource Constraints

- Internal staffing is limited due to user support demands, availability of technical staff outside of business hours is limited.

- Help Desk and training resources are shared across other ISS initiatives and may not be exclusively available for SIP migration support.

Technical Constraints

- No technical constraints are currently known.

Vendor and Support Constraints

- CallTower's implementation timeline requires a minimum two-week notice post-purchase order before beginning work.
- All professional services are based on standard business hours (8am–5pm CST, M–F); off-hours support requires special coordination and may incur additional costs.

Risks

The SIP migration project at McLennan Community College faces several critical risks that must be actively monitored and mitigated.

- **Porting Delays:** AT&T may delay number porting beyond requested dates. *Mitigation:* Submit port order at least 90 days in advance.
- **Service Disruption:** Risk of downtime during cutover. *Mitigation:* Staggered DID migration with fallback to PRI.
- **E911 Misconfiguration:** Incorrect routing could cause compliance issues. *Mitigation:* Pre-deployment validation of all E911 routes.
- **Bandwidth/Firewall Issues:** SIP requires stable WAN and proper firewall configs. *Mitigation:* Perform pre-cutover SIP traffic testing.

Bibliography

2025-30 Strategic Plan. (2025). McLennan.edu.

<https://www.mclennan.edu/data/Strategic%20Planning/strategicPlan.html>

SIPTRUNK Team (2023, December 15). *The definitive guide to SIP trunking vs PRI: A comparison*. SIPTRUNK

<https://www.siptrunk.com/blog/sip-trunking-vs-pri/>

CallTower. (n.d.). *CT SIP: Unlocking great features and stability*. <https://www.calltower.com/ct-sip/>

Revision History

Version	Date	Updater Name	Description
V 0.1			