

A Report for San Francisco Department of Technology

Network Rates Evaluation

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Executive Summary

The City and County of San Francisco Dept of Technology (CCSF DT) maintains a citywide telecom infrastructure contract for legacy voice and data transport services with AT&T Corp., leveraging contract rates from the State of CA's Integrated Telecommunications Network agreements known as the CALNET program.

CCSF DT wants to conduct due diligence on the published rates of AT&T and its competitors in the CALNET NextGen program.

To satisfy CCSF's request, Gartner has performed telecom rate evaluation focused on the following questions.

- How does the contract pricing under the State of CA's CALNET Next Generation Contracts compare to market price ranges?
- Should CCSF 1.) to bid out the City's book of business for telecom infrastructure services (both legacy telephone services + data transport services) Or 2.) leverage contract rates for telecommunication services under the CALNET contracts, migrating from CALNET 3 to CALNET Next Generation contract rates?
- What would be the pros and cons of each solution?
- Which rates and vendors offer the most price advantage?
- What areas should CCSF DT negotiate with AT&T to lower rates further?

Competitiveness

Gartner evaluated the CCSF DT Telecommunications contract spending of approximately \$896,000 monthly, based on April 2021 invoices.

Gartner scope of analysis included the following:

CCSF DT circuits for CALNET-3 rates:

- Sub-Category 1. 1: Dedicated Services
- Sub-Category 1.2 : MPLS
- Sub-Category 3: Metropolitan Area Network
- Sub-Category 5: Managed Internet Services
- Sub-Category 6.1 Hosted IVR/ACD Services

items evaluated as best effort:

- Sub-Category 1.4: Long Distance
- Sub-Category 1.5 : Toll Free
- Sub-Category 1.6 : Legacy Telecommunications

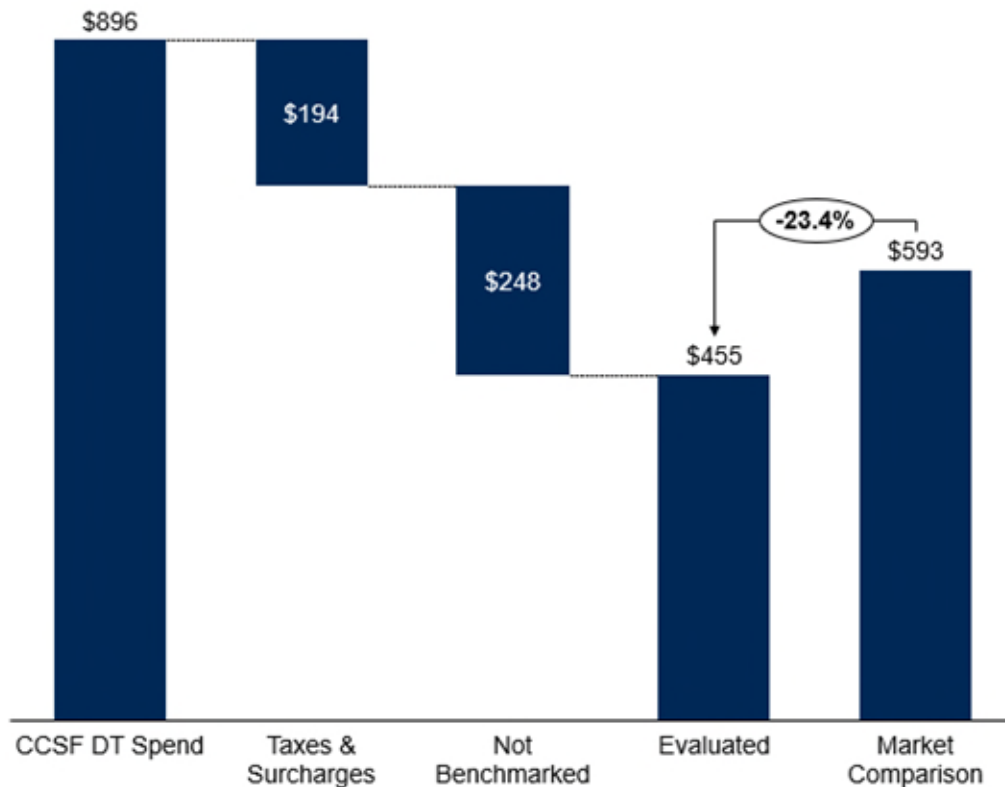
Gartner compared the invoice data to market rates in our Network Price Benchmark Database, which contains current market pricing for telecommunication voice and data circuits. The database was augmented with publicly available State and Local contracts as needed to support the analysis.

Our analysis focused on three market segments: 1) State and Local, 2) CALNET and 3) Commercial rates. The comparisons provided in the Executive Summary are based on State and Local contract pricing. Additional detail on CALNET and Commercial rates is provided in the Service Comparison section of this report.

The analysis benchmarked 66% of the CCSF DT Telecommunications spend contract excluding Taxes and Surcharges (\$194K). The Not Benchmarked (\$248K) component accounts for approximately 30% of the services and include elements, primarily Telephony, that were not available within the Gartner database.

Our analysis indicated CCSF DT Telecommunications spending is approximately 23% below competitive market rates.

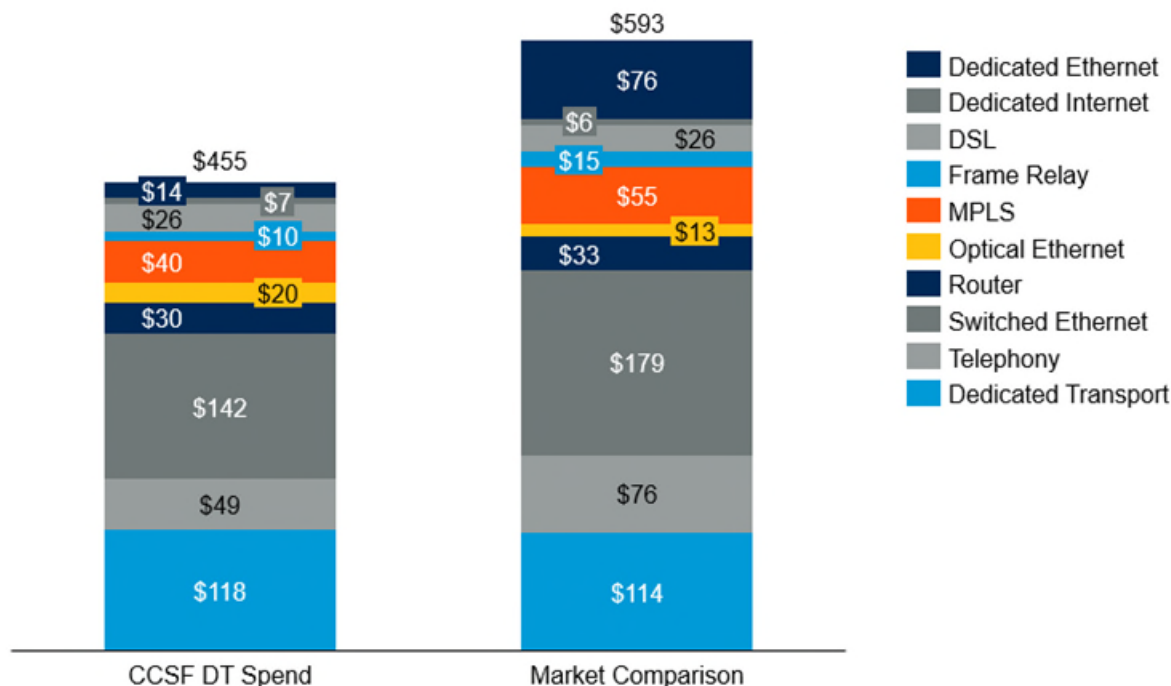
Figure 1. CCSF DT Spending Compared to Market Rates (\$K Monthly)



Opportunities to Align to Market Rates

Gartner analysis evaluated unit rates for individual telecommunications technologies. The following chart depicts CCSF DT spending vs market for each technology.

Figure 2. CCSF DT Spending Compared to Market Rates by Technology (\$K Monthly)



Opportunity for Cost Improvement

Optical Ethernet and Dedicated Transport (DS0, DS1, DS3, ISDN) represent approximately 20% of the CCSF DT Telecommunications spend and are approximately 8% above competitive market prices.

Conclusion

Gartner evaluated market competitiveness and total costs of sourcing. Current Prices for current CCSF DT requirements are below market (23%) and competitively aligned with CALNET 4 pricing. Opportunities exist to optimize pricing with the current agreement and to modernize services to leverage newer technologies, which may provide better services at a comparable cost. Gartner believes CCSF DT can achieve optimum price and service alignment by leveraging contract rates for telecommunication services under the CALNET contracts

Should CCSF DT desire to recompetete telecommunications services in an open market procurement, CCSF DT should consider increased market rates for services and the Total cost of Sourcing of \$2.4M to \$5.3M in one-time costs (further detail enumerated in Total Cost of Sourcing Considerations Section below).

Gartner Methodology

Gartner uses a two-phase approach to perform the Network Analysis. This approach is our standard and robust methodology that has been used consistently and successfully across all contract price benchmarks.

In Phase 1 comparative contracts are identified based on the size and scope of the CCSF – DT requirements. In this analysis, three peer groups were considered: State & Local contracts, CALNET 4, and commercial contracts.

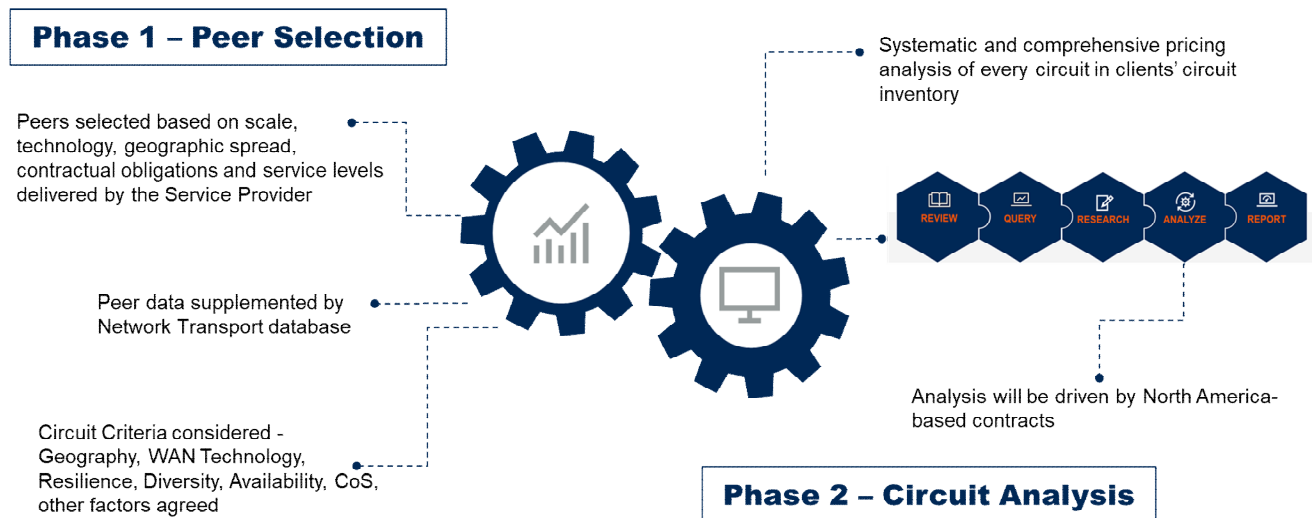
In Phase 2 of the process Gartner developed an inventory of CCSF DT voice and data services currently procured under the CALNET3 contract and compared these services to available contract pricing in the peer groups.

The peer group of State and Local contracts is the primary peer price comparisons for the analysis. To ensure accurate depiction of the State and Local market for these services Gartner leveraged the following contract characteristics:

- Current contract pricing during the previous 12 months
- State and Local contracts that supported similar organizational size
- Minimum of four (4) contract rates for each circuit rate

Our analysis further evaluates the additional internal sourcing and provider costs required to achieve the operational state for the environment. This component provides a “Total cost of Sourcing” view from service initiation to operational state.

Figure 3. Gartner Network Price Benchmark Methodology

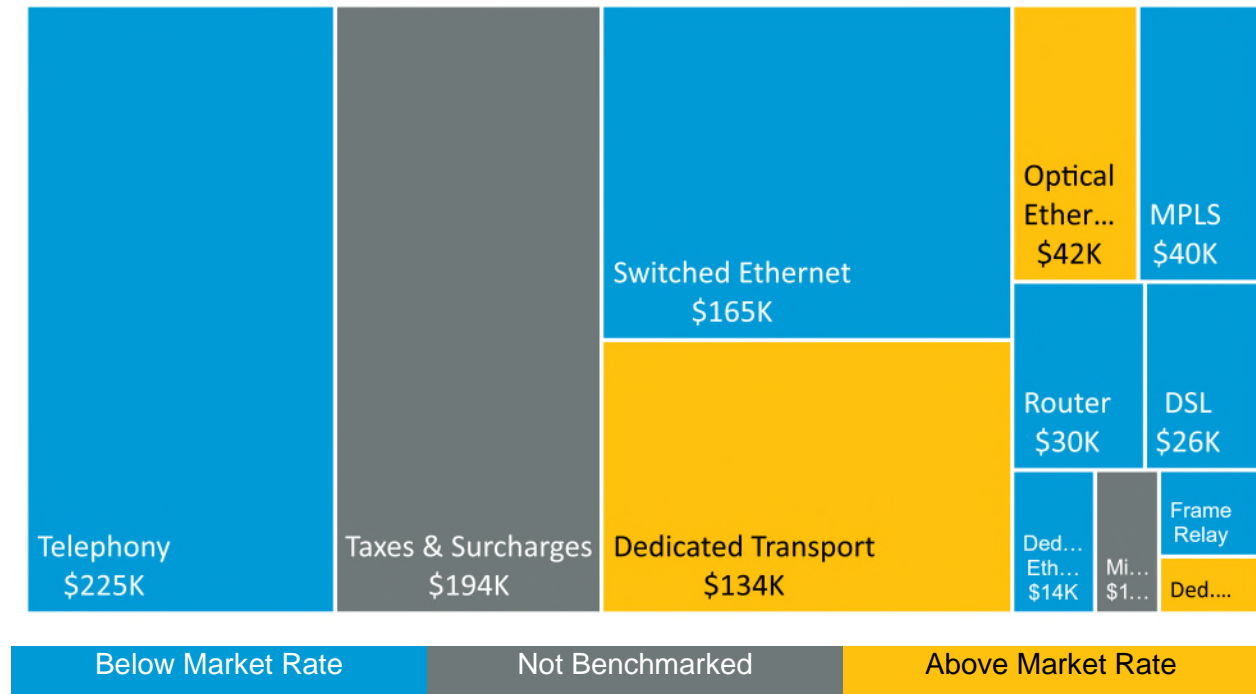


Telecommunications Contract Rate Comparisons

State and Local Contract Rates

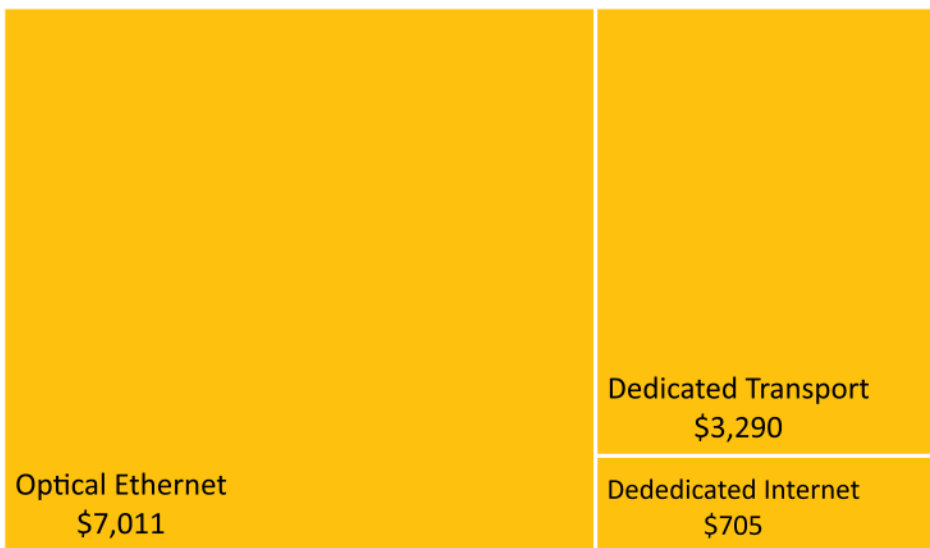
CCSF DT total Monthly Charges by network technology are depicted below

Figure 4. CCSF DT Total Monthly Spending by Technology with Variance Overlay



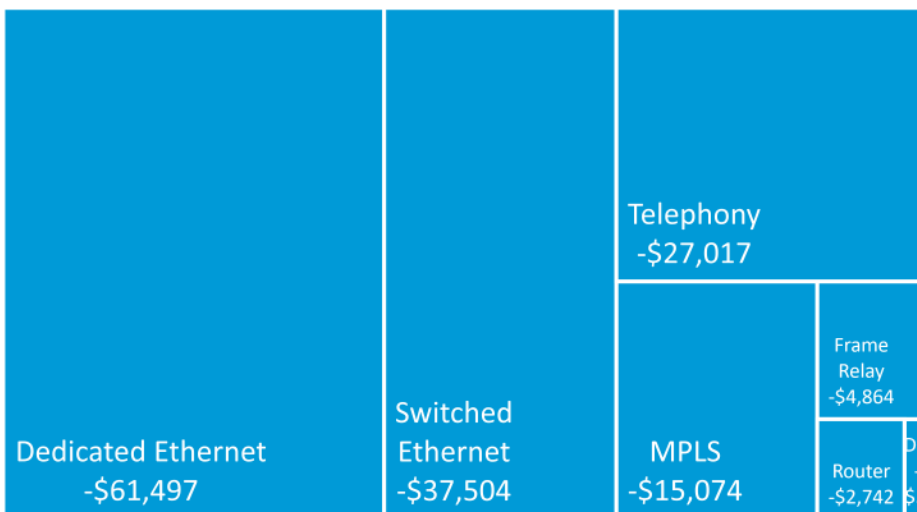
The following areas are Above Market rates, which represent \$11K of potential savings.

Figure 5. CCSF DT Spending Technologies Above Market



The following areas are Below Market rates, which represent \$149K variance.

Figure 6. CCSF DT Spending Technologies Below Market



Dedicated and Switched Ethernet represent the largest variance from market rates. Dedicated Ethernet variance is primarily driven by large 10G circuit pricing. Switched Ethernet pricing variance is primarily driven by 1G circuit pricing which is offset by 100M circuits which are 15% above the median market rate.

The following table summarizes the spending and variances by technology for CCSF DT contract when compared to other State and Local Contracts.

Figure 7. CCSF DT Spending versus Market Rates

Technology	CCSF DT		Market Rates	Variance from Market	
	Monthly Spend	Evaluated Spend		%	Monthly \$
Dedicated Ethernet	\$14K	\$14K	\$76K	-81%	-\$61K
Dedicated Internet	\$7K	\$7K	\$6K	11%	\$1K
DSL	\$26K	\$26K	\$26K	-3%	-\$1K
Frame Relay	\$10K	\$10K	\$15K	-33%	-\$5K
Mileage	\$11K	\$0K	\$0K	0%	\$0K
MPLS	\$40K	\$40K	\$55K	-27%	-\$15K
Optical Ethernet	\$42K	\$20K	\$13K	55%	\$7K
Router	\$30K	\$30K	\$33K	-8%	-\$3K
Switched Ethernet	\$165K	\$142K	\$179K	-21%	-\$38K
Telephony	\$225K	\$49K	\$76K	-36%	-\$27K
Taxes & Surcharges	\$194K	\$0K	\$0K	0%	\$0K
Dedicated Transport	\$134K	\$118K	\$114K	3%	\$3K
Total	\$896K	\$455K	\$593K	-23%	-\$138K

CALNET4 Contract rates

Gartner compared current CCSF DT rates (April 2021) to CALNET4. The analysis focused on Dedicated Ethernet, MPLS, Switched Ethernet and Dedicated Transport. Overall, the current CCSF DT rates are aligned with CALNET4. The table below represents the comparisons.

Figure 8. CCSF DT Spending Versus CALNET4 Rates

Technology	CCSF DT		Variance
	Monthly Spend	CALNET4	
Dedicated Ethernet	\$13.8K	\$13.8K	0.0%
MPLS	\$10.5K	\$10.5K	0.0%
Switched Ethernet	\$110.1K	\$109.2K	0.8%
Dedicated Transport	\$95.3K	\$95.2K	0.1%

Commercial Contract rates

Gartner considered Commercial Contract rates in its evaluation and found the rates to be higher than State and Local Contracts. Based on CCSF DT's position against the State and Local peer group, additional Commercial contract analysis was not performed.



Total Cost of Sourcing Considerations



Framework and Analysis

Gartner leverages a Total Cost of Sourcing framework that evaluates key variables which impact an organization’s cost to move services to a new provider and the costs of providers to support the pre-operations requirements. Our framework establishes guidance as a percentage of the first-year contract value. The estimates are based on Gartner experience and research.

Figure 9. Total Cost of Sourcing Estimate

Annual CCSF- DT Contract Value	\$10,757K	
Gartner Range	Low	High
Team	2%	5%
Transaction	5%	7%
Transition	10%	20%
Transfer	0%	5%
Transformation	0%	5%
Contingency	5%	7%
Potential costs range	\$2,367K	\$5,271K

Definitions

Team Costs

incremental on-going internal costs required to manage Supplier(s) and internal stakeholders

Transaction Costs

One-time costs to execute the sourcing strategy

Transition Costs

One-time costs needed to conduct knowledge transfer and move existing service to the new vendor

Termination Costs

One-time cost to exit existing contracts including potential circuit termination

Transfer Costs

One-time costs regarding staff, contracts and assets (if any)

Transformation Costs

One-time costs and investments required to automate operations

Contingency Costs

Contingency Costs – pool for unknown activities and risk mitigation

Technology Considerations

During the evaluation Gartner compared pricing for the services as currently procured. Our analysis identified several legacy technologies that CCSF DT should consider or continue to exit from the network environment. Many of these services have lower cost with increase service features or capabilities available from Network providers.

Voice Telephony

Pricing for CCSF DT Centrex and Business access lines are competitively priced. Service Features (e.g., Call Waiting, Call Forwarding, Unpublished Number) were not evaluated by Gartner and Represent approximately \$50K of monthly expenses. CCSF DT should continue migration to VoIP/SIP services to further reduce voice telephony costs.

Data Circuits

CCSF DT currently utilizes Dedicated Transport (DS0, DS1, DS3, ISDN), Frame Relay and DSL. Many of these circuits (approximately 1,400) are below 3 Mbps port speed. Competing technologies, such as Dedicated Internet and Switched Ethernet, are likely more cost-efficient solutions offering greater port speed. Additionally, as CCSF DT consider migration to CALNET4, it is likely the providers will offer Flat Rate Internet with a minimum of 5 Mbps.

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