

T1 versus DSL

Is a T1 connection better than a DSL connection?

A more appropriate question might be...
 "Is a T1 connection "more suitable" than a DSL connection?"

A T1 connection and a DSL connection both offer bandwidth at high speed but have two factors that greatly differentiate them from one another. Those factors are price and reliability.

Feature	T1	DSL
Main Advantage	Quality	Cost
Target Customer	Organization with mission-critical need for high-speed connectivity, including web hosting and company-wide access.	Residential users and small sized businesses requiring cost-effective alternative for high-speed access.
Speed	1.544 at all times (Full T-1) 768k (Fractional T-1)	128k, 384k, 768k, 1064k* (speeds and synchronous transmission is not guaranteed)
Government Regulation	Regulated -- State and FCC regulations mandate minimum cost escalation, defined quality levels, and customer service responsiveness.	Unregulated -- There are no State and FCC regulations in place. Circuit cost escalations, defined quality levels, and customer service responsiveness are at the discretion of local Telco and the third party DSL provider.
Service Level Guarantees	- 100% connection uptime - 85ms round trip packet transmission - 40 business day installation - Proactive outage notification	None
Speed vs. Distance	Guaranteed fixed speeds, independent of distance.	Speed is dependent on distance from Telco central office - the farther away, the slower the speed. Synchronous transmission cannot be guaranteed.
Distance Limit	No limitations on distance from CO.	Limited to 3.5 miles from CO.
Circuit Availability	T1 circuits are widely available.	Limited availability -not all towns served.
Physical Circuit	T1 circuits are engineered for digital data transmission and may be delivered via fiberoptic.	DSL connections are made from voice-grade copper telephone circuits. Fiber, bridges or taps on circuit will prohibit DSL.
Application Use	Proven in mission-critical situations.	Unproven in mission -critical situations.
Reliability	Dedicated T1 connections are rock-solid and based on proven, mature technology. High availability and reliability.	DSL is a promising new technology. However as with most technological breakthroughs, there is a lot of pain while the bugs are being worked out. DSL has the tendency to drop frequently and is sensitive to weather conditions.
Connection	T1 service offers private point-to-point dedicated connection between the customer and Our Tier 1 backbone network -- there is no middleman.	DSL is provided through a third-party vendor and is connected via a shared, switched ATM network. A number of customers are aggregated at multiple single connection points (DSLAM in each DSL Central office). Each aggregation point is a potential point of failure.
Installation	T1 circuit installation process is predictable averaging 30-40 business days.	DSL installation is uncertain and can be problematic, ranging from 40 days to 90 days plus. At least 10 percent of orders will never be installed due to telco issues.
Circuit Repairs	FCC mandates a one-hour repair response from telco providers, once a trouble ticket on T1 circuits is opened.	DSL connections are treated as voice-grade circuits. This means the telco will not respond to trouble tickets until the next business day.