



our employees. Colorado Relay users will get the same level of highly trained employees to facilitate their relay calls.

4.1.1.8 Consumer input. The State Relay Advisory Committee will strive to provide a mechanism for customer input on the operation and improvement of the State Relay program. The contract mechanism for obtaining consumer input, obviously, shall be the ORAC and/or other representative meetings with community groups. The ORAC shall coordinate, consolidate system. Offerors are invited to provide other examples of how they will build an effective consumer input (e.g., relay user or internal) survey system.

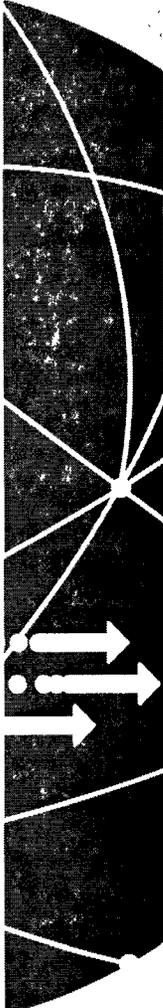
AT&T Response:

AT&T has read and meets this requirement.

We welcome and support any and all consumer input on the operation and improvement of the Colorado Relay program. Our designated account manager, Kenya Lowe will collaborate as needed with the State Relay Advisory Committee and will serve as first point of contact to the State Relay Advisory Committee. All complaints and suggestions provided and received from the Relay Advisory Committee will be noted and discussed with the appropriate AT&T team (i.e. Operations, Methods and Training, Technical, Service Management team, etc.). Suggestions that can be implemented quickly and will not increase billable minutes to the State or negatively impact other customers will be addressed. Suggestions that may increase billable minutes to the State will be discussed first with the State Administrator to obtain concurrence before implementation.

Consumer input will include both TRS and Captel program and issues.

AT&T will also use other mechanisms for consumer input such as customer contacts through Customer Care and contacts made through the website. These are effective ways to gauge customer satisfaction with the service being provided. When detailed information is provided by the customer such as CA# and date/time of call, AT&T is able to immediately follow up with the CA that handled the call regardless of whether the contact was a complaint or a commendation. If it is a complaint, the CA's manager is involved and the CA is made aware of the specifics of the complaint and a plan is implemented to review the appropriate procedure and, if necessary, implement a





performance improvement plan. Customer contacts received through the Customer Care or Website are tracked and recorded in our database and reported on the monthly Customer Care report provided. Following is an example of the customer contact intake form used to record these customer contacts.

AT&T Relay Services						
Case #	01XXXX					
Customer Information	12/7/2011					
Case Open Date/Time	12/7/2011 7:17 PM	Case Closed Date/Time	12/9/2011			
Case Type	Relay Cust Care	Case Status	Cust Initiated		State	CO
Area	(NPA) 598-4983	TTY	Case #	12/7/2011		
Customer Information						
Area	(NPA) 598-4983	TTY	Case #	Case #	Case #	Case #
Area	(NPA) 598-4983	TTY	Case #	Case #	Case #	Case #
Area	(NPA) 598-4983	TTY	Case #	Case #	Case #	Case #
Inquiry						
General Assistance		Explanation of Relay/Services				
12/7/2011 7:20:47 PM cw3138: VCO 12/7/11 5:30 PM – Per E. Culbertson						
Customer wanted to know how to place a VCO call.						
12/7/2011 7:20:47 PM cw3138: VCO 12/7/11 5:30 PM – Per E. Culbertson						





Additionally, our designated account manager will partner and collaborate with the Advisory Committee and the State Relay Administrator in preparing and administering an annual customer service survey where we will ask survey respondents to assess things such as:

- Typing speed and accuracy
- Speed of answer
- Type of service used (TTY, HCO, VCO, STS, CTS)
- Frequency in using the state relay service
- Knowledge and awareness of the Relay Program
- How the relay service is used (personal or business)
- Things the provider does well
- Things the provider needs to improve
- Suggestions for new services and features

The respondents will not be required to provide personal identifying information on the annual survey but will be given the option to provide it in the event the responder would like someone to follow up. The results of the annual survey will be shared with the State Administrator and the Relay Advisory Committee.

Another mechanism that will be used to acquire and solicit consumer input will be Relay Town Hall meetings that will be held every quarter throughout the State of Colorado. These town hall meetings will provide an opportunity to not only educate users about the various feature of the Colorado Relay Service but also to gather valuable input, suggestions and feedback on how to improve the service. In the same way as feedback received through the Advisory Committee, the consumer input provided at Relay Town Hall meetings will be noted and discussed with the appropriate team (Operations, Methods and Training, Technical, Service Management, etc.) in order to determine best course of action.

Lastly, another mechanism that AT&T uses and has access to is social media. We have a whole organization that is tasked with searching for, and responding to, inquiries, comments and complaints posted by relay users about the relay service. We also have a dedicated social media manager in-house that can provide support and expertise on managing social media for the Colorado Relay Service. We have used social media as an effective way for improving our services and obtaining customer feedback.



File Source: Answer Performance Summary Report

Contract	October 2011 - % Service Level Performance																															ASA
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	
	S	S	M	T	W	T	F	S	S	M	T	W	T	F	S	S	M	T	W	T	F	S	S	M	T	W	T	F	S	S	M	
AT&TLD	100	99	97	98	99	100	100	100	100	100	99	99	99	99	100	99	100	99	99	100	99	100	100	99	98	99	99	99	100	100	100	
AT&T1	98	96	91	91	97	97	99	99	99	100	97	95	90	94	99	95	98	94	96	99	97	100	98	98	93	96	96	96	98	100	100	
AT&T2	99	96	92	89	94	98	99	98	99	100	96	93	87	94	96	95	98	94	95	99	96	99	98	97	92	96	95	95	98	99	100	
AT&T3	99	99	99	99	99	100	100	100	99	100	100	99	99	100	100	100	100	100	100	100	100	100	100	98	99	100	100	99	98	99	100	
AT&T4	98	100	97	100	98	100	100	100	100	100	100	98	100	100	100	100	100	100	99	98	97	100	99	100	100	95	99	95	100	100		
OSD	99	98	98	99	98	98	100	100	100	100	100	99	95	97	100	100	100	99	99	100	99	100	100	99	95	99	97	98	100	100	100	
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	ASA
	S	S	M	T	T	T	F	S	S	M	T	W	T	F	S	S	M	T	W	T	F	S	S	M	T	W	T	F	S	S	M	
AT&T5	0.2	1.2	3.1	3.9	1.5	0.7	0.4	0.2	0.4	0.9	0.8	2.7	7.3	0.9	0.3	1.2	0.3	1.0	0.6	0.2	0.8	0.4	0.5	0.7	0.7	1.2	1.8	0.7	0.9	0.2	0.2	1.2
AT&Tspan	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	

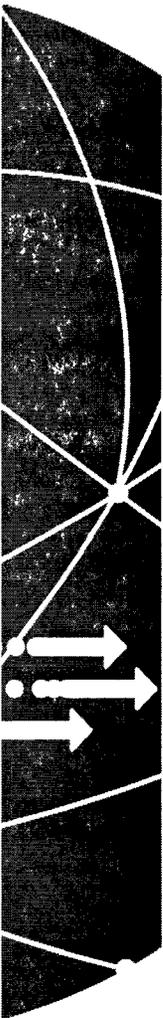
These are actual results from October 2011 which considered normal month with 5 weekends and no holidays. The actual state name has been protected.

The contract labeled "AT&T 5" has a more stringent answer requirement where all calls must be answered within 3 seconds. As illustrated on the chart provided, we averaged a 1.2 second speed of answer for all calls in the month of October.

These results are possible because of the vast experience of our Operations Force Management team which monitors service level results 24 hours a day on every quarter hour. Additionally, every center has access to a tool called, "TotalView." This tool allows the center personnel team to see how many relay operators are "active" and taking calls; how many are "available"; the number of relay operators that are scheduled; how many calls are in queue and amount of time a call has been waiting to be answered.

In those rare instances when the service level is missed, we understand that there is a possibility that penalties assessed at the discretion of the State Relay Administrator.

AT&T believes it is important to keep the State Administrator of events where the service level or blockage rate is missed as soon as it occurs. For this reason, the designated account manager will notify the State Administrator via phone call and in writing no later than the next business day of any incidents or days (if on the weekend) in which the service level was missed. We will also provide, to the best of our ability, a reason for missing the service level. This should assist the State Administrator in determining whether the assessment of any penalties is warranted.





AT&T Upfront Automation (UFA). This technology was invented by AT&T and has not been duplicated by any other provider. With UFA, both voice and TTY callers are able to immediately and directly enter the number they wish to call. They don't have to wait for the Relay Operator to come on the line and request it. What are the advantages of UFA?

- a. Less time interacting between the Relay Operator and the caller which saves time during call setup and saves the state billable minutes
- b. Since the caller directly enters the number they wish to call themselves, there aren't incidents where the Relay Operator transposes the number to dial. Entering the wrong number results in redials and new attempts to call to the correct number. With UFA, the data entry errors are nearly eliminated resulting in less attempts to call out and less billable time to the state.
- c. Calls were UFA is utilized arrive to the Relay Operator already set up and with the press of one button, the Relay Operator dials the call reducing call set up time and saving billable time to the state.

Quick Launch. This is another technological feature developed by our AT&T Relay engineers. With Quick Launch, any caller that utilizes our UFA feature and does not require special assistance and does not have a Relay Customer Profile (RCP), will have the call automatically dialed at the same time that the Relay Operator is connected to the call. With other relay providers, the Relay Operator controls when that call is actually launched or dialed out. Potentially, the Relay Operator could wait several seconds before processing the call. Those seconds can add up at the end of the month.

Automatic activation of Carryover functionality. This is another feature developed by our AT&T engineers that has been often imitated but not duplicated. With our sophisticated relay platform, any caller who is profiled as a VCO users (or HCO user) will have the carryover feature automatically activated. The VCO user can begin speaking as soon as they see "VCO ON GA."

The VCO user does not need to wait for the Relay Operator to come on the line in order to request VCO. With our automatic carryover feature, the VCO user can immediately begin voicing their number or their conversation without having to type. The beauty of our technology is that this works whether the profiled VCO user is the call originator or the call receiver. This is one more way in which our technology saves time and therefore, billable minutes to the state.



Don't be misled in thinking that an industry report that attempts to compare industry providers is a measure of efficiency. We have actual technology that we have implemented and have shown proven results in the area of efficiency.

We have several other features we can implement if the State so desires that will also improve "call wrap up" time and result in even more savings on billable time.

4.1.4 MULTIPLE/ADDITIONAL SERVICES (VALUE ADDED)

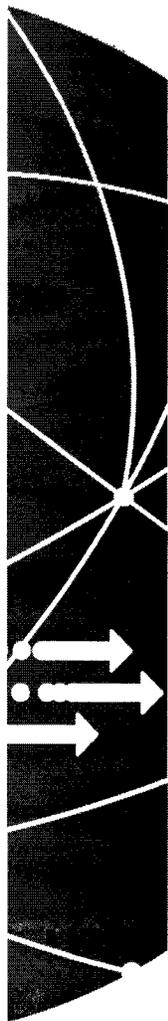
The RFP specifies minimum requirements for the State's TRS. Nothing in the RFP or in any other sections of the RFP is intended to prohibit an Offeror from providing additional features or capabilities beyond those specified in the RFP at no additional cost. Offerors should specify any additional services that will be provided at no additional cost. Additional services may be available from the incumbent Tandy State Office offering additional services at no cost. The Offeror should also describe the other services they would like to provide at no additional cost.

AT&T Response:

AT&T has read and meets this requirement.

As the state relay provider for Colorado, we will strive to bring your relay users all the features and service offered to other states at no additional cost. For example, if one of our other state TRS contracts requires a feature not currently offered in Colorado, we will do everything we can to deliver the same feature at no additional cost. For example, we trialed a new Video Assisted Speech-to-Speech service for California and are now working to bring that capability to our other states at no additional cost. Below is a short list of other features not currently required in your RFP that we will bring to Colorado if awarded the contract:

- a) **Video-Assisted Speech to Speech.** An enhanced way for speech to speech users to communicate with the relay operator via an internet connection and a video phone or web camera. This enables the relay operator to see facial and hand gestures to facilitate communication.
- b) **Last Number Dialed.** Enables profiled relay users to select an option that allows them to ask the CA to dial their last number placed by the relay service. We





stored this information in our secure database for up to twenty four hours after the caller has disconnected.

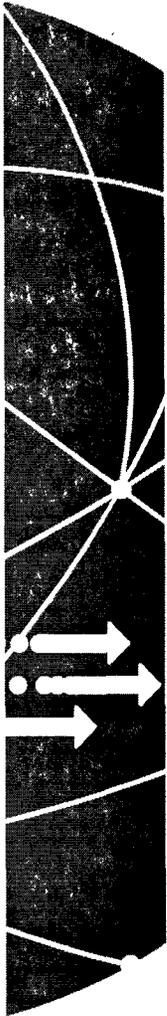
- c) **Expanded list of speed dials on Customer Profiles.** We allow profiled users to have access to up to 100 frequently called numbers. More than any other relay provider.
- d) **Multi-user Profiles.** AT&T was the first provider to make this feature available which allows households with multiple relay users to each have their own profile.
- e) **First Thought Message for STS users.** This feature allows profiled STS users to provide the first message they would like to convey to the receiver of a STS call. This can include a greeting, message, or instructions to the call receiver.
- f) **Follow Me for STS users.** Allows STS users to designate their “can be reached” numbers during specified days and hours of the week.

4.1.5 ADDITIONAL REQUIREMENTS FOR FCC CERTIFICATION

Providers shall identify other FCC requirements for certification related to STS, such as, of essential, technical or functional requirements not otherwise specified in the RFP, which providers participating in this requirement will comply.



enough capacity for the forecasted volumes. In the unlikely event we find we are nearing our threshold for capacity in the centers, we have enough space in these existing call centers to build out. Additionally, the build out work would be done by technicians and experienced work planning engineers all part of the AT&T corporate real estate (CRE) organization. Later, our expert team of service managers and developers would install the relay platforms and call center equipment. Following please find more in-depth responses to the requirements in this section.





4.1.6.1 Building Requirements. Offerors shall document ability to provide additional capacity to meet relay center to handle the State's call center needs. Offerors shall provide all other direct and office supplies and hardware. Offerors shall provide all other physical plant needs. Offerors shall also provide a detailed description for any new or existing central building and office space. Offerors shall state how they will handle any additional capacity needed for an Offeror of early migration. Offerors shall also provide a detailed description of any other equipment and software they would use to handle the State's requirements. Offerors shall also provide a detailed description of any other equipment and software they would use to handle the State's requirements.

AT&T Response:

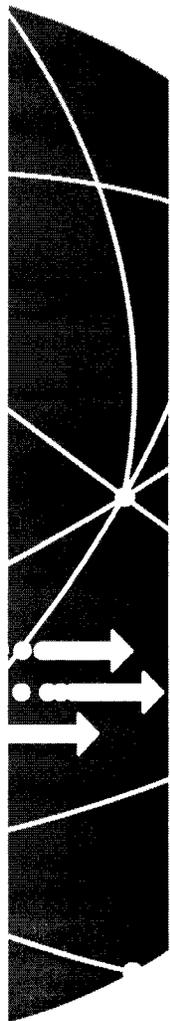
AT&T has read and meets this requirement.

Our current National Relay Team is totally scalable and currently has the capacity to handle twice the number of calls we handle today.

Our SNAP platform is also fully scalable. We currently handle more than 12M minutes and we have the capability to handle twice that amount. Considering the decline in TRS minutes, along with our scalability, we don't anticipate any technical concerns with meeting this contractual requirement in our existing call centers.

1. Initially, we look at the spare capacity of our platform in steady-state operation. This includes CA positions, floor space availability, back office computing, power, circuits and networking, and finally the availability of trained CA staff.
2. Secondly, we overlay the new Colorado contract requirements and the estimated traffic expectations over the course of the contract. We complete mathematical modeling and proprietary algorithms while adjusting for time-zone differences; evaluating what our new busy-hour requirements and system loads will be.
3. Finally, we provision whatever elements we need to continue operating with the new contracted traffic again at no more than a 50% peak capacity. That may include anything from more modems, more CPUs, more UPS capacity, additional networks (trunking), new CA hires, and possibly even a new call center.

By following this fundamental engineering build-out philosophy, AT&T's technical topology continues to have the ability to accept new customers and contracts without





massive disruptions in service or delays in provisioning new equipment or software. In over 24 years, AT&T Relay has never had a service outage due to engineering or scaling changes (up or down) within our national relay complex.

As stated earlier, we operate at no more than a 50% capacity. At 50%, we can afford to lose half of our system and still handle all calls. At a higher capacity level, say 75%, you can only lose 25% of the system to be able to handle all calls. We have a very detailed expansion plan model we use for annual planning to look at total traffic and capacity and if our projections show that we will exceed 50% capacity we put plans into place to increase capacity as necessary.

We currently have capacity to accommodate additional workstations in each of our centers as follows:

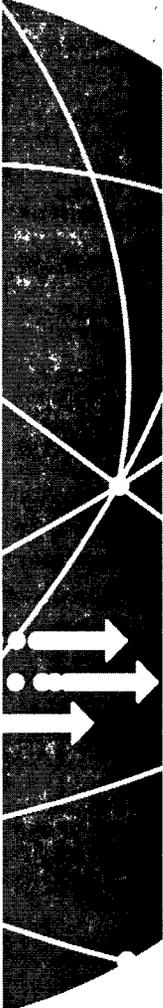
Augusta, GA has 43 workstations in operation with the capacity for an additional 42 workstations

Newcastle, PA has 65 workstations in operation with the capacity for an additional 52 workstations

San Antonio, TX Spanish call center has 6 workstations in operation with the capacity for an additional 6 workstations

Norton, VA has 21 workstations in operation with the capacity for an additional 23 workstations

We would gladly host a visit for the SRA and its delegates to visit one or all of our call centers to demonstrate how capacity and the space we currently have for building out.





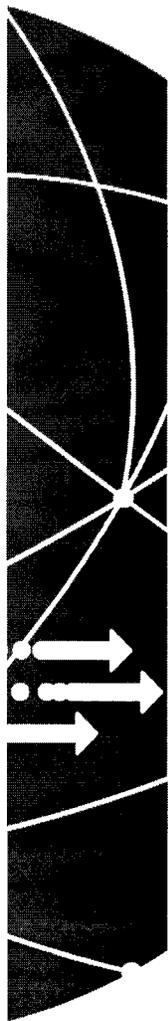
4.1.6.2 Telecommunications Service Priority (TSP). The Agency desires to have TSP equipment designated to TSP in terms of providing standard services.

AT&T Response:

AT&T has read and meets this requirement.

We take pride in stating that we were the **first relay provider** to voluntarily have all of our call centers designated as Telecommunications Service Priority in 2005. We did not wait for the state relay administrators to ask us to do this. We did it because we knew it was the right thing to do. We will continue to maintain all the call centers that will be used to handle Colorado traditional relay under TSP.

The next page provides a copy of the press release that was made by State of Maryland which was the first state to have TSP designation while AT&T was the state relay provider.





ROBERT L. EHRLICH, JR.
Governor
MICHAEL S. STEELE
Lieutenant Governor

JAMES C. DIPAULA, JR.
Secretary
CECILIA JANUSZKIEWICZ
Deputy Secretary

FOR IMMEDIATE RELEASE
March 17, 2005

Media Contact
Nancy Seidman, Maryland Relay
410-767-6962; nancy@mdrelay.org

Maryland Relay Users to Benefit from FCC-Launched Initiative
Maryland is First State in Nation to Implement Telecommunications Service Priority Program

(Baltimore, MD) – Through the effort of the Ehrlich-Steele Administration, Maryland Relay, the telecommunications system that provides telephone access between the deaf, hard of hearing, DeafBlind and speech disabled citizens of the state and those who do not have a disability, announced today that it is the first state relay center in the nation to be enrolled in the FCC's Telecommunications Service Priority (TSP) Program.

The FCC initially established the TSP Program in 1988 to establish a priority of restoration of telephone service to critical facilities and agencies, at a time when telecommunications repair companies are typically overburdened with service requests. The program presently restores telephone services most critical to national and homeland security on a priority basis in the event of a national crisis. Recently, the FCC has partnered with the Department of Homeland Security to increase TSP participation.

With the program successfully implemented in Maryland, Maryland Relay users be able to make and receive calls in emergencies, just like standard telephone users in the same calling areas.

"Relay facilities are essential in ensuring reliable, effective communication between people with hearing and speech disabilities and emergency services or other people," says Brenda Kelly-Frey, director of Telecommunications Access of Maryland (TAM), a public service provided by the Ehrlich-Steele administration. "In the event of a disaster, it's vital that all appropriate steps be taken to ensure that service to relay centers is restored as soon as possible."

The Baltimore-City-based Maryland Relay is now assured that when service is disrupted, it will receive full attention for priority restoration before any non-TSP service.

About Maryland Relay

Maryland Relay, a public service provided by the Ehrlich-Steele Administration and overseen by TAM – Telecommunications Access of Maryland – is a program under the State Department of Budget and Management. Maryland Relay is designed for any deaf, hard of hearing, DeafBlind or speech disabled citizen of the state who wishes to communicate over the telephone with a hearing person or persons. To make a Maryland Relay call, simply dial 7-1-1 from any phone. All calls are handled with the strictest confidentiality and there are no setup fees or monthly charges. Please visit www.mdrelay.org for further information.

To interview a Maryland Relay representative, please contact Nancy Seidman, Public Relations Coordinator with Maryland Relay, at 410-767-0962 or seidma@dbm.state.md.us.

~ Effective Resource Management ~

301 W. Preston Street, Suite 1003A, Baltimore, MD 21201
Tel: (410) 767-6968 (Voice TTY) • Fax: (410) 767-4270 • Toll Free: 1 (800) 522-7724 (Voice TTY)
<http://www.dbm.maryland.gov>





4.1.6.3 Location. The award of the award by the state shall be based on the lowest possible cost to the state for the award within the United States of America. Offerors of proposed services shall provide a list of all facilities for a 24-hour a day/7 days a week. Offerors proposing to provide services shall provide a list of all facilities for a 24-hour a day/7 days a week. Offerors proposing to provide services shall provide a list of all facilities for a 24-hour a day/7 days a week. Offerors proposing to provide services shall provide a list of all facilities for a 24-hour a day/7 days a week.

AT&T Response:

AT&T has read and meets this requirement.

In order to provide the relay users with the most efficient service at the lowest possible cost to the state, our proposal will route Colorado Relay calls across our National Relay Team (“NRT”) 24 hours a day/7 days a week. The NRT consists of three well-staffed and experienced call centers which are **all located in the United States and are staffed with AT&T employees** – not contractors:

New Castle, Pennsylvania

Augusta, Georgia

San Antonio, Texas (Spanish Relay Service)

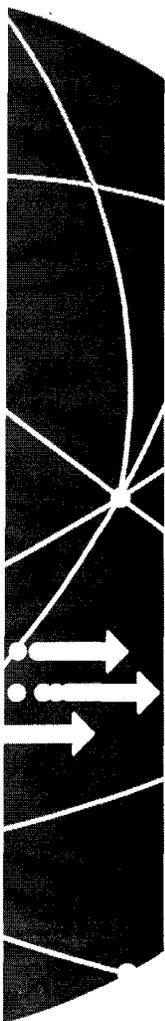
With more than 300 experienced CAs working across these three centers, Colorado Relay users will experience a high level of confidence that their relay call will be promptly answered and placed.

CapTel

CapTel will be provided from the CapTel Service Relay Center located at 5801 Research Park Blvd., Madison, WI 53717 and at 310 W. Wisconsin Ave. Suite 1200 West Milwaukee, WI 53203.

The following provides information for the CapTel call centers:

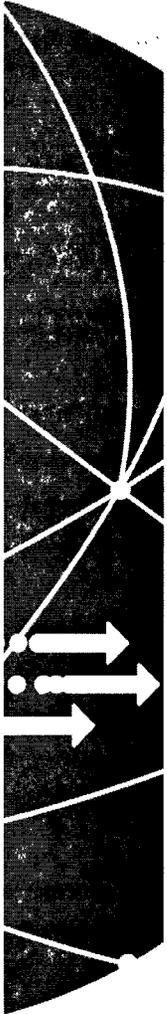
- The two CapTel call centers are located in Madison Wisconsin and Milwaukee Wisconsin in stand-alone buildings with other businesses or departments co-located.





- Floor locations are: Madison call center = 1st, 2nd and 3rd floors, Milwaukee call center 12th floor.
- CTI's Captel Centers are constructed and operated in such a manner that access to operator positions is denied to the public and unauthorized employees of CTI and the TRS Provider.

4.1.6.4 **Equipment.** Offeror shall furnish all necessary telecommunication services and equipment to be used in an array for all telephone services into and out of the city center. The equipment shall meet or exceed current industry performance standards for reliability and noise. The center must have telecommunication services capable of receiving and transmitting in both 12 digit and 7 digit codes. Key systems must be capable of automatically identifying incoming 12 digit or 7 digit





AT&T Response:

AT&T has read and meets this requirement.

We will furnish all necessary telecommunications equipment and software capable of full and normal communication with inbound callers and outbound called parties compatible with relay equipment commonly used and at speeds generally used for the duration of the contract. This includes support for TTY, voice, and computer users via these protocols: voice (inc. STS), public switched network TTY, Baudot TTY, TurboCode®, ASCII Computer, and ASCII. AT&T's equipment automatically adjusts to match the protocol and speed of the TRS user's equipment. No manual intervention by the CA is required for our system to effectively communicate with the TRS user. Our Relay service is not device centric and is compatible with the basic protocol of TDDs.

The circuits used in the AT&T relay call centers meet or exceed the industry standards as outlined in the American National Standards Institute – Network Performance – Switched Exchange Access Network Transmission specifications (ANSI T1.506-1997). These are as follows for standards for transmission characteristics:

1. American National Standards Institute/Electronic Industries Association (ANSI/EIA) PBX standard TIA/EIA – 464B.
2. American National Standards Institute- Network Performance- Switched Exchange Access Network Transmission Specifications (ANSI T1.506- 1997)
3. ANSI T1.508-1998 Revision, re-designation and consolidation of ANSI T1.508-1992 and ANSI T1.508a- 1993 << American National Standards for Telecommunications Loss Plan for Evolving Digital Networks Secretariat Alliance for Telecommunications Industry

In the event that ANSI amends or changes these standards, we will also change our standards to meet all and any amended standards throughout the contract period.

AT&T is constantly improving its networks and systems to ensure our technology remains at the top of performance and our systems are properly staged to handle any relay traffic patterns. Over the past few years, we have:

- Upgraded our Avaya Switches (PBX) at \$800,000 per switch
- Upgraded all of our firewalls and routers at a cost of approximately \$200,000



- Completed half of our CA Position Replacement Program, with a completion planned for 3Q1012 at a total cost of \$1,000,000

AT&T's relay platform employs a very sophisticated system architecture that enables flexible configuration while maintaining a high degree of reliability. This architecture has been field-proven by more than 20 years of experience providing relay to numerous states and NECA.

Here's how we'll support the Colorado Relay environment.

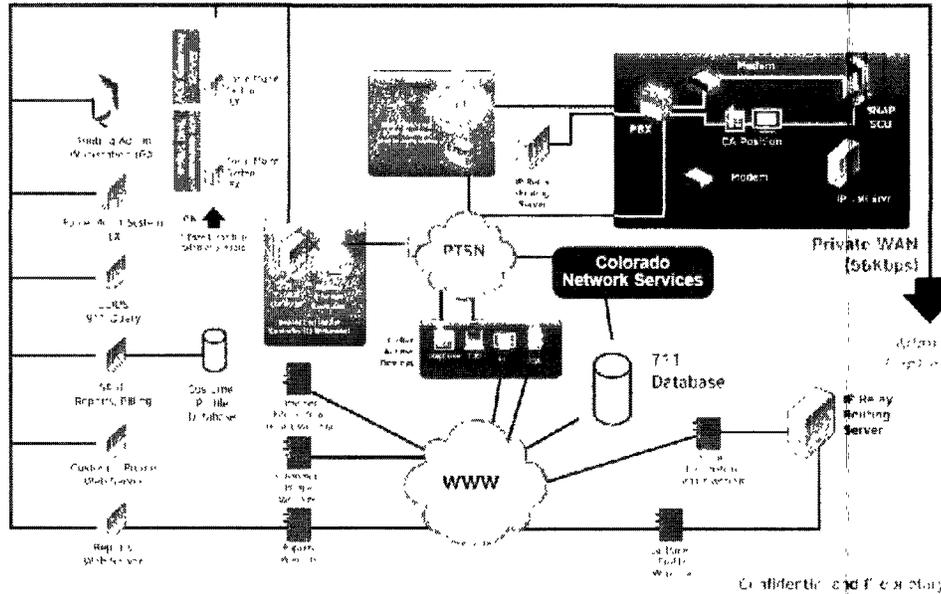
AT&T Relay Service Technical Infrastructure At Work

1. Our platform takes customer dialed calls (7-1-1 or 800 numbers) and routes them to the call center best suited to perform and the CA best trained to handle the particular call type.
2. At our call center, we use both a customer profile database (voluntary for callers) and automated systems to determine how best to handle the call and the forward number desired before the call routes to the CA.
3. Typically, we dial the forward number in less than three seconds, and we connect the parties almost immediately.
4. After the call, our system sends a call detail record with more than 130 fields to a central database computer that compiles records from all AT&T call centers. This assures flexible and integrated real-time reports enabling call center managers to monitor performance and immediately adjust staffing as necessary.





AT&T Relay Service Technical Infrastructure



AT&T's Relay Service Technical Infrastructure: Redundancy and agility built into our infrastructure deliver outstanding performance for average speed of answer and far party connection. These attributes support functional equivalency for your relay callers.

With our comprehensive scope of services, AT&T is positioned to and will deliver the benefits of efficiency, streamlined coordination, common methods and processes, and compatible personnel to exceed your requirements for the envisioned environment for Colorado Relay.

AT&T uses equipment and software that are capable of full and normal communication with relay equipment commonly in use and at speeds generally at use.

AT&T will furnish all necessary telecommunications equipment and software capable of full and normal communication with inbound callers and outbound called parties compatible with relay equipment commonly used and at speeds generally used for duration of the contract. This includes support for TTY, voice, and computer users via these protocols: voice (inc. STS), public switched network TTY, Baudot TTY, TurboCode®, 1TTY, ASCII Computer, and ASCII. AT&T's equipment automatically adjusts to match the protocol and speed of the TRS user's equipment. No manual





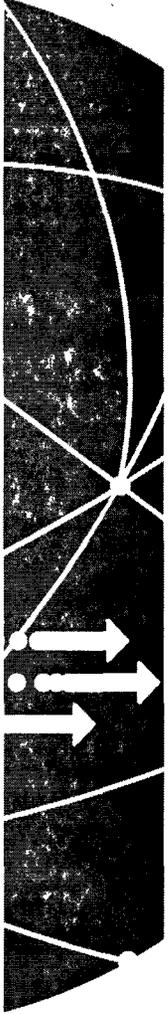
intervention by the CA is required for our system to effectively communicate with the TRS user.

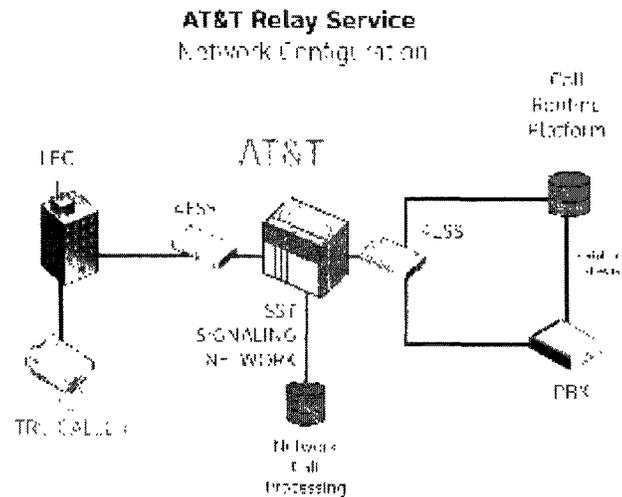
We use Ultratec™ modems exclusively. These modems were designed in joint cooperation between Ultratec™ and AT&T Bell Laboratories to meet the stringent AT&T data transmission quality requirements. By partnering with Ultratec™, the industry leader in ASCII/Baudot modems, attributes such as TurboCode® become available to our customers immediately after introductions. AT&T relay centers are equipped and capable of handling any modem speed generally in use.

AT&T has a long and successful relationship with Ultratec, the industry leader in manufacturing and providing ASCII/Baudot modems. This partnership enabled us to be the first relay provider to provide enhanced modalities like TurboCode® and the “interrupt” capability to all our customers across all our contracts. We did this without incidental charges that would “nickel and dime” our state customers. AT&T will continue to explore opportunities to enhance the communication modalities of TTY users and relay users to improve their relay call experience and move them closer to functional equivalence.

AT&T uses Signaling System 7 (SS7) as an out-of-band signaling method, ensuring that all calls are routed quickly and accurately. In addition, we use Integrated Services Digital Network (ISDN) Primary Rate Interface (PRI) protocol between the 4ESS switch and the relay center’s PBX and Automatic Call Distributor (ACD).

The communication between our Intelligent Call Router (ICR) and the AT&T network is all SS7. This protocol provides Automatic Number Identification (ANI), calling party number (CPN), originating line screening (OLS), and privacy or blocking information for all inbound calls in the same manner as non-relay callers who reach the regular “0” or “00” operator. The TRS caller’s phone number is not passed on to the called party if the calling party has Caller ID blocking invoked by his/her local telephone company. Following is a diagram which further illustrates the call flow we describe here.





AT&T provides fully functional SS7 capability for calls within our network, thereby possessing the ability to transfer calls in full compliance with 47CFR §64.1600 of the FCC's Rules to achieve functional equivalence.

We offer one additional feature with our True Caller ID solution -- this feature is not currently available through any other relay provider. Profiled callers may select which number they wish to be transmitted to the called party. Profiled callers may have their telephone number sent or the Relay Service's generic telephone number sent. We developed this feature because many relay customers prefer to give the called party a "forewarning" that the call is coming through relay.

The network and facilities that support our Relay Service will meet all the following measures and standards for transmission characteristics:

- American National Standards Institute/Electronic Industries Association (ANSI/EIA) PBX standard TIA/EIA – 464B.
- American National Standards Institute- Network Performance- Switched Exchange Access Network Transmission Specifications (ANSI T1.506- 1997)
- ANSI T1.508-1998 Revision, re-designation and consolidation of ANSI T1.508-1992 and ANSI T1.508a- 1993 << American National Standards for Telecommunications Loss Plan for Evolving Digital Networks Secretariat Alliance for Telecommunications Industry

The circuits that we will provide are ISDN MegaCom 800, which will transverse on the Software Defined Network (SDN) within the AT&T telecommunications architecture.



These circuits comply with a grade-of-service of P.01, which provides a functionally equivalent probability of a fast busy as one might encounter on the overall voice network.

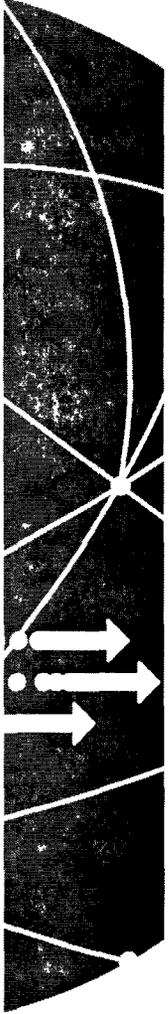
Redundancy and agility built into our infrastructure deliver outstanding performance for average speed of answer and far party connection. These attributes support functional equivalency for your relay callers.

AT&T is constantly improving its networks and systems to ensure our technology remains at the top of performance and our systems are properly staged to handle any relay traffic patterns. Over the past few years, we have:

- Upgraded our Avaya Switches (PBX) at \$800,000 per switch
- Upgraded all of our firewalls and routers at a cost of approximately \$200,000
- Completed half of our CA Position Replacement Program, with a completion planned for 3Q1012 at a total cost of \$1,000,000

Here is a list of the equipment we now include in our system architecture for the AT&T Relay Service Private Network:

- More than 350 Communications Assistant positions, including those for training and monitoring
- 3 Avaya Aura telephony switches
 - 6 Avaya Call Control Servers
 - 6 CTI Servers
 - Remote AVAYA G-450 Media Gateway
- Cisco Intelligent Call Routing System deployed on multiple redundant VMware servers.
- 4 Avaya adjuncts supporting COC feature
- 2 CSIDS Servers. Shared Operator Service functions providing Directory Assistance and emergency number access
- Network Firewalls: interface with the IP/IM (Internet) Call Servers and Relay Call Centers:
 - 5 SonicWall 200
 - 8 SonicWall Pro 230 (4 as spares)
- Network Servers:
 - 4 General Use Installation Servers. IBM XSERIES 3650 , OS= Linux RHEL5





- 20 Service Control Units (SCU) for use as Call Center Servers. IBM XSERIES 3650 , OS= Linux RHEL5
- 3 IP Development Servers. HP ProLiant DL360, OS = RedHat Linux, CPU = Pentium 3
- 1 Customer Interface Server. HP ProLiant DL360, OS = Windows, CPU = Pentium 3
- 2 Billing Servers. SUN FIRE V880. OS = Solaris 5.9
- 13 Internet Call Servers.
 - 10 IM Call Servers. HP ProLiant DL360. OS = RedHat Linux, CPU = Pentium
 - 3 IM Internet Control Servers. IBM XSERIES 3650 , OS= Linux RHEL5
- Network Routers:
 - 17 Cisco 2600 Routers/ISDN/T1/56K cards
 - 3 Cisco 3600 Routers ISDN PRI/T1 cards
- Network Switches/Hubs:
 - 4 Cisco 2900 series switches (4 for WAN, plus call center LAN switches)

The benefits of our flexible configuration include the ability to

- Quickly react with any modification necessary to meet your requirements because we maintain a staff of in-house software developers who support the relay platform.
- Customize our system to meet caller needs expeditiously, without the time and cost associated with a special development project.
- Maximize speed of answer by networking all our call centers together and having a central call routing system that monitors call answer conditions in each center. Our central database reporting system allows us to report on a particular call type no matter where that call was handled in the system. Having a single point of call routing at the front-end of the system and a single point of call routing at the back-end of the system enables us to treat the entire call center complex as a single virtual call center. Other providers may claim to be the only one who can support your relay traffic if a call center fails, but this is simply not true. AT&T can certainly accommodate, with no perceptible effect, the loss of a call center.
- Instantly route calls away from a center that is undergoing a service recovery event. One example of a service recovery event is when a fire drill forces the CAs