HIGH CAPACITY SERVICES

A. Application of Informational Guide

1. This section contains provisions, rates and charges applicable to the provision of LATA access channels, intraLATA channels and other miscellaneous services, hereinafter referred to collectively as service(s), provided by Verizon Pennsylvania, Inc., hereinafter referred to as the Telephone Company, to Intrastate Customers, hereinafter referred to as customer(s).

2. LATA access service for purposes of this Informational Guide is service provided between locations within the LATA which require interactive engineering and where the customer is responsible for the overall design parameters of the service. This service is usually ordered for the purpose of extending the service and thereby constitutes a portion of an end to end interLATA service. Those services will be referred to as LATA access services.

3. IntraLATA service for purposes of this Informational Guide is service provided between locations within the LATA where the Telephone Company is responsible for the overall design parameters of the service. These Services will be referred to as IntraLATA services.

4. The provision of such services by the Telephone Company as set forth in this Informational Guide does not constitute a joint undertaking with the customer for the furnishing of any service.

5. The provisions, rates and charges contained herein are in addition to the applicable provisions, rates and charges specified in other Tariffs or Guides of the Telephone Company which are referenced herein.

6. In addition to the provisions established in this Informational Guide certain regulations pertaining to LATA access services provided for use by agencies or branches of the Federal Government, users authorized by the Federal Government and state emergency operations centers are set forth in Pa. P.U.C.-No. 302, Part 10.

7. In addition to the provisions set forth in this section, provisions pertaining to LATA access services are contained in Section 1A, General Provisions-Access Service, of this Informational Guide. General Provisions pertaining to intraLATA services are contained in Section 1, General Provisions, of this Informational Guide.

8. If a portion of an intraLATA channel is provided by another Exchange Telephone Company, any established charges applied by that company are in addition to the charges of this Company and any established regulations of that company apply to the use of the channel between points in its operating territory and points outside of that territory.

9. Regulations pertaining to the provision of LATA access channels where more than one Exchange Telephone Company is involved can be found in Section 1A of this Informational Guide.

HIGH CAPACITY SERVICES

A. Application of Informational Guide (Cont'd)

10. CUSTOMIZED PRICING OPTION (CPO) - HIGH CAPACITY SERVICE

CPO - High Capacity Service is High Capacity Service described in this Informational Guide, which may be offered at rates and terms set forth below to customers who demonstrate to the Telephone Company that they are considering competitive alternatives to Verizon's High Capacity Service.

Once it is determined that a customer is considering viable competitive alternatives to this company's High Capacity Service, the Telephone Company may offer payment terms for High Capacity Service which meet individual customer requirements. Payment terms and rates will be determined by the Telephone Company and will be set forth in separate schedules between the Telephone Company and qualifying customers. The rates will range from a floor represented by the costs of furnishing service to a ceiling represented by the rates set forth in Section 6 of this Informational Guide. Rates will be developed on an individual case basis and will be sufficient to cover the appropriate forward-looking incremental costs as determined by the Telephone Company. The rate will be developed including the appropriate engineering labor rate, craft labor rate, cost of material and contribution. The schedule and applicable Telephone Company Informational Guide shall constitute the contract for High Capacity service between the Telephone Company and its customers.

B. General

1. Rate Element Classifications

Rates for Special Services are based on combinations of the following four basic rate element classifications:

- Local Channels
- Channel Mileage
- High Capacity Installation
- Optional Features

A. Local Channel

The Local Channel rate classification provides a communications path between a customer premises and the wire center serving that premises. The local channel rates will vary according to the cell assigned to the central office district in which the local channel resides. The cells are the same as those developed for Business Dial Tone Lines.

The cell designation is identified in the following sections of the Local Exchange Tariffs:

HIGH CAPACITY SERVICES

B. General (Cont'd)

1. Rate Element Classifications (Cont'd)

A. Local Channel (Cont'd)

Tariff/Guide	Coverage Area	Cell Density Designation
P.U.C.-No. 180A	All of Pennsylvania exchanges except as noted below	Paragraph B.4
P.U.C.-No. 182	Philadelphia Exchange Area	Paragraph E.2
P.U.C.-No. 182A	Philadelphia Suburban Exchange Area	Paragraph E.2
P.U.C.-No. 185B	Pittsburgh Exchange Area	Paragraph E.2
P.U.C.-No. 185C	Pittsburgh Suburban Exchange Area	Paragraph E.2

Local channel rates are provided in E. following.

B. Channel Mileage

The Channel Mileage rate classification provides for the transmission facilities between the serving wire centers associated with customers' premises, between a serving wire center associated with a customer premises and a Telephone Company Hub, between two Telephone Company Hubs or any combination thereof. Channel Mileage is portrayed in mileage bands. There are two rates that apply for each band, i.e., a fixed rate per band and a rate per mile.

C. High Capacity Installation

High Capacity Installation charges are one time charges that apply to the specific work activity associated with the installation of High Capacity service.

D. Optional Features

The Optional Features rate classification provides for optional features which may be added to a High Capacity Service.

Examples of features that are available include, but are not limited to, the following:

- Multiplexing
- Loop Transfer

HIGH CAPACITY SERVICES

B. General (Cont'd)

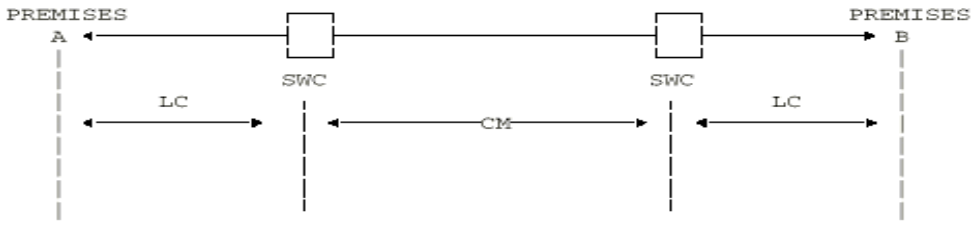
2. Service Configurations

There are two types of configurations over which High Capacity Service is provided in the same or different wire centers: two-point service and multiplexed service.

A. Two-Point Service

A two-point service connects two customer premises, two serving wire centers or any combination thereof, either on a directly connected basis through a serving wire center(s) or through a Hub where multiplexing functions are performed.

The following diagram depicts a two-point service connecting two customer premises located in different serving wire centers.



LC - LOCAL CHANNEL
CM - CHANNEL MILEAGE
SWC - SERVING WIRE CENTER

Applicable rate elements are:

- Local Channels (2 applicable)
- Channel Mileage (fixed rate + rate per mile)

Note: Local Channels are not applicable for the portion(s) of a service which terminates in a wire center(s) and does not extend to a customer's premises. All other rate elements are applicable, eg,. PDN, Centrex, Access Concentrator.

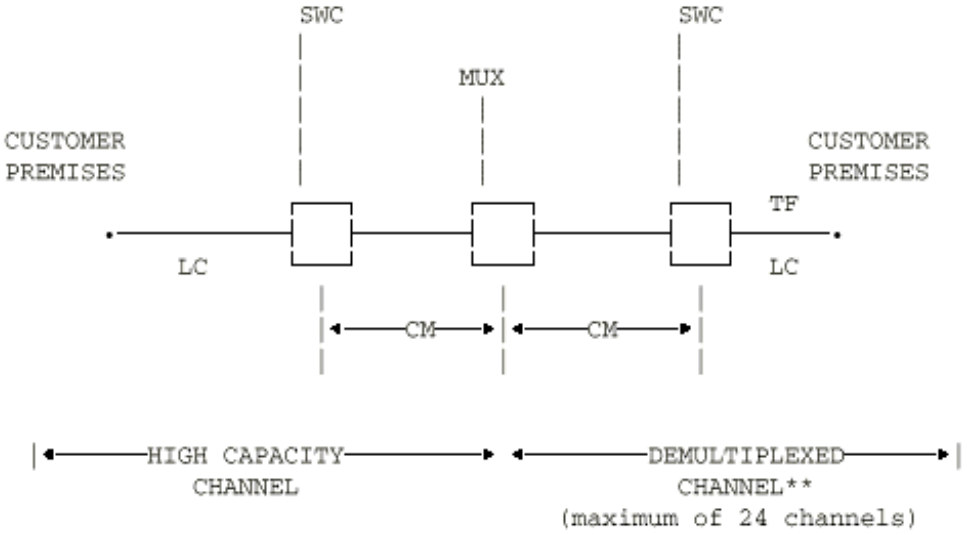
HIGH CAPACITY SERVICES

B. General (Cont'd)

2. Service Configurations (Cont'd)

B. Multiplexed Service

The following diagram depicts a two-point service connecting two customer premises through a Hub where multiplexing functions are performed.



LC - LOCAL CHANNEL
CM - CHANNEL MILEAGE
TF - TRANSMISSION FUNCTION
SWC - SERVING WIRE CENTER
MUX - MULTIPLEXOR HUB

Applicable rate elements are:

High Capacity Channel

- Local Channel (1 applicable)
- Channel Mileage (fixed rate + rate per mile)
- Multiplexing Arrangement (1 applicable)

Demultiplexed Channel**

- Local Channel (1 applicable)
- Transmission Function (1 applicable)
- Channel Mileage (fixed rate + rate per mile)

**Demultiplexed Channels are available in Pa. P.U.C. No. 304.

HIGH CAPACITY SERVICES

B. General (Cont'd)

3. Special Facilities Routing

Services furnished under this Guide are provided over such routes as the Telephone Company may elect.

A customer may request that the facilities used to provide Special Service be specially routed. The regulations, rates and charges for Special Facilities Routing are based on costs and are in addition to all other rates and charges which may be applicable under this Guide.

4. Special Construction

When the components required to provide service are not available, and when mutually agreeable to the customer and Telephone Company, special construction may be undertaken to provide the required service. The customer requesting channel services requiring special construction of facilities is liable for the costs incurred for that portion of the facilities not deemed to be reusable by another customer in the manner or quantity furnished. Tariff/Guide rates for the type of service provided are applicable in addition to the charges for the special construction. Additional regulations pertaining to Special Construction for LATA access services are set forth in Pa. P.U.C.-No. 302, Part 14, and in Pa. P.U.C.-No. 1, Section 1, General Regulations, for intraLATA services.

5. Design Layout Report For LATA Access Services

At the request of the customer, the Telephone Company will provide to the customer the make-up of the facilities and services provided under this Guide as LATA access service to aid the customer in designing its overall service. This information will be provided in the form of a Design Layout Report. The Design Layout Report will be provided to the customer at no charge, and will be reissued or updated whenever these facilities are materially changed.

6. Acceptance Testing

At no additional charge, the Telephone Company will, at the customer's request, cooperatively test, at the time of installation, the following parameters:

A. High Capacity acceptance tests will include tests for the parameters applicable to the service as specified in the order for service.

HIGH CAPACITY SERVICES

C. Service Description

1. High Capacity - 1.544 Mbps Service

A. Basic Channel Description

High Capacity Channels provide simultaneous two-way transmission of serial, bipolar, return to zero isochronous digital signals. The transmission speed of a High Capacity Channel is 1.544 Megabits Per Second (Mbps). A pulse density restriction, plus a constraint on customer-provided framing are part of the format constraint on High Capacity Channels. The format constraints permit the Telephone Company the use of every 193rd bit position for future use, therefore, the effective throughput rate available to the customer is 1.536 Mbps.

Commencing on the date of installation, the monthly rate for this service when furnished for intraLATA service as described in A.3 preceding will not increase for a period of 24 months.

High Capacity Channels are provided between customer premises, between a customer premises and a Telephone Company hub or between serving wire centers.

(1) Availability of Service

(a) High Capacity Channels require special equipment and will be provided only from those wire centers equipped for digital transmission. The wire centers equipped to furnish 1.544 Mbps High Capacity Channel service have been or will be designated by the Telephone Company. A Service inquiry must be made to determine availability of service.

(b) When the components required to provide service are not available, and when mutually agreeable to the customer and Telephone Company, special construction may be undertaken to provide the required service. In such cases, charges based on costs apply.

(2) Channel Service Unit Functionality

Channel Service Unit Functionality is required at all times at each station on a customer's premises to perform such functions as proper termination of the service, amplification, signal shaping and remote loopback testing. This functionality must be provided by the customer and it must comply with the requirements of the Bell Technical Reference Publication 62411 and Section 31 of Pa. P.U.C.-No. 1.

HIGH CAPACITY SERVICES

C. Service Description (Cont'd)

1. High Capacity - 1.544 Mbps Service (Cont'd)

A. Basic Channel Description (Cont'd)

(3) Connections

Terminal equipment to be provided by the customer must meet the following interface requirements:

Data signals, including timing and control where provided, exchanged at the interface between the customer's equipment and the High Capacity Local Channel must meet the signal and format constraints listed below.

(1) Data Rate: 1.544 Mbps +/- 75 bps.

(2) Consecutive zeros: no more than 15 consecutive zeros may be generated.

(3) Pulse Density: At least 3 pulses in any 24 bit interval.

Electrical, mechanical and functional specifications for these interfaces are available in TR-NPL-000054.

The Telephone Company's responsibility ends at the Rate Demarcation Point and does not include maintaining operational capability of customer-provided equipment. Customers must provide and maintain terminal equipment at their expense.

B. Technical Specifications Packages

	Package HC-					
Parameter	0	1	1C	2	3	4
Error-Free Seconds		X				

A channel with technical specifications package HC1 will be capable of an error-free second performance of 98.75% over a continuous 24 hour period as measured at the 1.544 Mbps rate through a CSU equivalent which is designed, manufactured and maintained to conform with specifications contained in Technical Reference PUB 62411.

HIGH CAPACITY SERVICES

C. Service Description (Cont'd)

1. High Capacity - 1.544 Mbps Service (Cont'd)

C. Channel Interfaces

The following channel interfaces (CIs) define the bit rates that are available for a High Capacity channel:

CI	Bit Rate
DS-15	1.544 Mbps (DS1)

Compatible channel interfaces are set forth in 4.5(F) following.

D. Optional Features

(1) Automatic Loop Transfer

The Automatic Loop Transfer provides protection on a 1xN basis against failure of the facilities between a customer premises and the wire center serving that premises. Protection is furnished through the use of a switching arrangement that automatically switches to a spare line when a working line fails. The spare line is not included as a part of the option. This option requires compatible equipment at both the serving wire center and the customer premises. The customer is responsible for providing the equipment at its premises. Equipment at the customer premises will be provided under Tariff/Guide only if it existed in the Telephone Company inventory as of November 18, 1983. This feature is not available with channels utilizing the clear channel capability (B8ZS) Line Code.

(2) Transfer Arrangement

This arrangement can be utilized to transfer a leg of a Special Service to either a spare or working channel that terminates in either the same or a different customer premises. A key activated or dial up control service is required to operate the transfer arrangement. A spare line, if required, is not included as part of the option.

(3) Central Office Multiplexing

(a) DS1 to Voice

An arrangement that converts a 1.544 Mbps channel to 24 channels for use with Voice Grade Services.

(b) DS1 to Digital

An arrangement that converts a 1.544 Mbps channel to 24 channels for use with Digital Data Services.

HIGH CAPACITY SERVICES

C. Service Description (Cont'd)

1. High Capacity - 1.544 Mbps Service (Cont'd)

D. Optional Features (Cont'd)

(3) Central Office Multiplexing (Cont'd)

(c) DS1 - DSO

Multiplexing unit that provides a 1.544 Mbps capacity to multiplex, on a digital time division basis, twenty-three 64 Kbps channels. Digital Data Multiplexing is available at the following wire centers (hubs):

(d) DSO to Subrate

An arrangement that converts a 64.0 kbps channel to subspeeds of up to twenty 2.4 kbps, ten 4.8 kbps, or five 9.6 kbps channels using digital time division multiplexing.

(4) Clear Channel Capability (CCC)

(a) CCC is an arrangement that allows a customer to transport 1.536 Mbps information rate signals over a 1.544 Mbps High Capacity channel with no constraint on the quantity or sequence of ones (mark) and zero (space) bits. This arrangement requires the customer signal at the channel interface to conform to Bipolar with Eight Zero Substitution (B8ZS) line code as described in Technical Reference TR-NPL-000054 and Technical Reference PUB 62508.

(b) CCC is provided on 1.544 Mbps High Capacity channels between two customer designated premises and is subject to the availability of facilities.

(c) The optional feature may be ordered at the same time the High Capacity service is ordered or it may be ordered as an addition to an existing High Capacity service. Customers must agree to out-of-service periods required to add this feature to an existing High Capacity service.

HIGH CAPACITY SERVICES

C. Service Description (Cont'd)

1. High Capacity - 1.544 Mbps Service (Cont'd)

D. Optional Features (Cont'd)

(5) Extended Super Frame (ESF)

(a) ESF allows the use of the framing signal for monitoring purposes as defined in TR-NPL-000054.

The following table shows the technical specifications packages with which the optional features are available.

	Available with Technical Specifications Package HC-					
	0	1	1C	2	3	4
Automatic Loop Transfer		X				
Central Office Multiplexing:						
DS1 to Voice		X				
DS0 to Subrate	X					
Transfer Arrangement		X				
Clear Channel Capability		X				
Extended Super Frame		X				

HIGH CAPACITY SERVICES

HIGH CAPACITY SERVICES

HIGH CAPACITY SERVICES

HIGH CAPACITY SERVICES

C. Service Description (Cont'd)

2. High Capacity - 44.736 Mbps/Lightwave Service (Cont'd)

A. Basic Channel Description

High Capacity/Lightwave Service utilizes lightwave technology to provide point-to-point channels between customer locations. This service will be provided by utilizing existing interoffice/ interexchange and local distribution facilities. The Telephone Company retains the right to refuse to accept customer requests for this service.

The type of facilities and the route of the facilities, other than as specifically requested by the customer and agreed to by the Telephone Company, will be determined by the Telephone Company.

This service is furnished on a full time basis, 24 hours a day, 7 days a week for the contract period.

B. Technical Specifications

When Lightwave service is ordered, the customer must specify to the Telephone Company the desired transmission speed and/or any other technical specifications of the service for the contract period.

A High Capacity DS-3 channel is a channel for the digital transmission of 44.736 Mbps isochronous serial data. The actual bit rate and framing format is a function of the channel interface selected by the customer. High Capacity channels are provided between customer designated premises or between a customer designated premises and a Telephone Company Hub.

All Lightwave services which are ordered with an optical interface option are provisioned with protection at the Serving Wire Center. DS3 services with this interface option will terminate in telephone company provided Optical Line Terminating Equipment (OLTE) located in the Telephone Company's serving wire center. The OLTE located at the customer's premises is subject to the mutual agreement of the parties and the associated protection and transmission capabilities must be compatible with the OLTE specified in the Telephone Company's central office. All of these offerings are only available where facilities permit and may be provisioned over multiple systems and any combinations of facilities and transmission speeds.

C. Payment Plans and Liability

(1) The customer is responsible for payment of the charges for the full capacity of the facilities ordered by the customer regardless of the extent of actual utilization by the customer.

HIGH CAPACITY SERVICES

C. Service Description (Cont'd)

2. High Capacity - 44.736 Mbps/Lightwave Service (Cont'd)

C. Payment Plans and Liability (Cont'd)

(b) Contracts are required to enumerate the customers exact service requirements and terms. Upon expiration of the contract, a new contract may be negotiated.

(c) Two standard payment plans are available during the contract period. These are:

(1) Upon installation of the service, the customer may elect to pay a one time non-recurring charge which covers the agreed upon charge for installing the facilities. Thereafter, the customer pays an agreed upon monthly recurring charge for maintaining the facilities over the contract period.

or

(2) Upon installation of the service, the customer may elect to pay 10% or more of the one time non-recurring charge which covers the agreed upon charge to install the facilities. The remainder of the applicable, agreed upon non-recurring charge (up to 90% of the total) to install the facilities may be spread over the contract period at an agreed upon monthly rate and subject to any agreed upon termination liability charge. In addition, the customer would be liable for the agreed upon monthly recurring charge for maintaining the facilities over the contract period.

(d) The Telephone Company retains ownership of the facilities provided.

(e) The customer is liable for all costs for cancellation or change of application for service prior to establishment as stated in Section 1, Paragraph 27 of this Informational Guide for intraLATA channels and LATA access channels.

D. Rates

Rates and charges will be developed on an individual case basis and will be sufficient to cover the appropriate incremental costs as determined by the Telephone Company.

HIGH CAPACITY SERVICES

C. Service Description (Cont'd)

3. Volume Term Pricing Plan (VTPP)

(A) Description

Volume Term Pricing Plans are pricing options available to DS1 customers. A customer, by Billing Account Number (BAN), meeting one or more of the requirements described below, can subscribe to specific longer term commitment periods in exchange for reduced monthly rates.

DS1 customers with 1 to 4 local channels can subscribe to pricing option one, as delineated in section E.3., and have the option of 2-yr, 3-yr, or 5-yr commitment periods.

DS1 customers with 5 to 8 local channels can subscribe to pricing option two, as delineated in section E.3., and have the option of 2-yr, 3-yr, or 5-yr commitment periods.

DS1 customers with 9 to 100 local channels can subscribe to pricing option three, as delineated in section E.3., and have the option of 2-yr, 3-yr, or 5-yr commitment periods.

DS1 High Capacity Service plans are applicable to local channels and channel mileage rate elements.

Multiple DS1 High Capacity Services must be in the same billing account in order to be in the same Volume Term Pricing plan.

Rates for Volume Term Pricing Plans are detailed in Section E.3. Volume Term Pricing Plans do not include optional features and function or nonrecurring charges. Monthly rates and non-recurring charges apply for all other rate elements.

Volume Term Pricing Plans are not applicable to services in other rate plans.

(B) Terms and Conditions

(1) When requesting a Volume Term Pricing Plan (VTPP), the customer must specify the length of the desired commitment period and the services which are to be included in the plan.

(2) When requesting any VTPP activity regarding local channels, the customer must specify by circuit identification number which circuits are to be affected.

HIGH CAPACITY SERVICES

C. Service Description (Cont'd)

3. Volume Term Pricing Plan (VTPP) (Cont'd)

(B) Terms and Conditions (Cont'd)

(3) When ordering VTPP services, related rate elements must be ordered under the same plan. For example, both local channels, and channel mileage for a given circuit must be in the same plan and have the same service date.

(4) At the end of a VTPP commitment period, the associated service(s) will revert to monthly service rates unless the customer subscribes to a new VTPP.

(5) Each Volume Term Pricing Plan (VTPP) will require a separate contract and is considered independent of all other pricing plans.

(6) The customer is responsible for identifying each circuit to be included in a pricing plan.

(C) Termination Liability

(1) A termination liability payment is applicable when a service is disconnected in full or in part prior to the end of the selected commitment period or when the customer fails to comply with the conditions required for VTPP, except as set forth in (D) following.

(2) If the customer requests all channels of a DS1 service to be used for Switched Access, the request will be treated as a disconnect and termination liability will be assessed.

Changes, such as adding optional features to a channel, will be permitted. Any change which results in the removal of local channels from a pricing plan without adding additional local channels to meet that plan's volume requirements is considered to be a termination of the contract.

(3) The termination liability payment applies to each individual recurring rate element associated with a VTPP which is disconnected prior to the expiration of the commitment period of the VTPP.

HIGH CAPACITY SERVICES

C. Service Description - High Capacity (1.544 Mbps) (Cont'd)

3. Volume Term Pricing Plan (VTPP) (Cont'd)

(C) Termination Liability (Cont'd)

(4) Termination liability will be computed as follows:

For services discontinued within the first year, the customer will be liable for 100% of the total monthly charges for the unexpired portion of the initial 12 months; and 15% of the total monthly charges for DS1 local channels and 30% of the total monthly charges for all other DS1 rate elements for the remaining portion of their VTPP commitment period.

For services discontinued after the first 12 months of a plan, customers will be liable for 15% of the total monthly charges for DS1 local channels and 30% of the total monthly charges for all other DS1 rate elements for the remaining portion of their VTPP commitment period.

(D) Termination Without Liability

(1) A VTPP may be canceled without liability should the applicable Tariff/Guide rates increase.

(2) A request to change to a longer commitment period will nullify the current termination liability. All terms and conditions associated with the new VTPP will apply.

(3) Termination liability is not applicable if the customer requests to upgrade service to a higher capacity service and meets all of the following conditions:

The new service is provided between the same locations as the disconnected service.

The new service is purchased under a long-term agreement equal to or greater than the commitment period of the service being disconnected.

The orders for the disconnect of the existing VTPP rate elements and the new connect are received by the Telephone Company at the same time, with the same due date, and are related together by a Related Purchase Order Number (RPON).

The total bandwidth (in kbps) of the service is greater than or equal to the bandwidth of the discontinued service(s).

HIGH CAPACITY SERVICES

C. Service Description (Cont'd)

3. Volume Term Pricing Plan (VTPP) (Cont'd)

(E) Additions To Plans

Customers with an existing VTPP who wish to increase the number of their DS1 services have the following options:

Subscribe to the additional services under the monthly payment plan.

Subscribe to the additional services under a separate VTPP.

Upgrade existing plan of equal or greater length.

D. Channel Interface and Network Channel Codes

1. Glossary of Channel Interface Codes and Options

Code	Option	Definition
DS -		digital hierarchy interface
-	15	1.544 Mbps (DS1) format plus D4
-	15B	1.544 Mbps (DS1) format per PUB 62411 and Supplement A plus D4 with B8ZS clear channel capability
-	15E	8-bit PCM encoded in one 64 kbps of the DS1 signal
-	15F	8-bit PCM encoded in two 64 kbps of the DS1 signal
-	15G	8-bit PCM encoded in three 64 kbps of the DS1 signal
-	15H	14/11-bit PCM encoded in six 64 kbps of the DS1 signal
-	15J	1.544 Mbps format
-	15K	1.544 Mbps format plus extended framing format
-	15L	1.544 Mbps (DS1) with SF signaling
DU -		digital access interface
-	A	1.544 Mbps format
-	B	1.544 Mbps format plus D4
-	C	1.544 Mbps format plus extended framing format
-	D	1.544 Mbps (DS1) format per PUB 62411 and supplement A plus D4 with B8ZS clear channel capability

HIGH CAPACITY SERVICES

D. Channel Interface and Network Channel Codes (Cont'd)

2. Service Designator/Network Channel Code Conversion Table

The purpose of this table is to show the relationship between the service designator codes (e.g. VGC, MT2, etc.) and the network channel codes that are used for:

Service Designator Code	Network Channel Code
HCO	HS
HC1	HC

3. Digital Hierarchy Channel Interface Codes (4DSX-*)

This interface is available to customers that select the multiplexed four-wire DSX-1 or higher facility interface option at the customer premises and provide subsequent system and channel assignment data. The various digital bit rates in the digital hierarchy employ the channel interface code 4DS9, 4DS0 or 4DS6 plus the speed options indicated below:

Interface Code and Speed Option	Nominal Bit Rate (Mbps)	Digital Hierarchy Level
4DS9-15	1.544	DS1
4DS9-15L	1.544	DS1

4. Compatible Channel Interfaces

High Capacity

Compatible CIs

4DS15-DU

HIGH CAPACITY SERVICES

E. Rates and Charges

1. High Capacity (HC) Service (1.544 Mbps)

	Monthly Rate/Cell			
	Cell 1	Cell 2	Cell 3	Cell 4
A. Local Channel				
- Per termination				
Initial	$ 2,152.48	$ 2,306.14	$ 2,599.94	$ 2,767.44
Additional *	2,152.48	2,306.14	2,599.94	2,767.44

* The additional local channel monthly rate and the Nonrecurring Charge apply to High Capacity services installed between the same locations as the initial channel.

HIGH CAPACITY SERVICES

E. Rates and Charges⊗ (Cont'd)

1. High Capacity (HC) Service (1.544 Mbps) (Cont'd)

	Nonrecurring Charge	
	Initial	Additional*
B. High Capacity Service Installation		
- Per termination	$660.00	$292.45

	Monthly Rate	
	Fixed	Per mile
Mileage Bands		
Over 0 to 1 mile	$768.62	-
Over 1 to 3 miles	768.62	$256.04
Over 3 to 5 miles	768.62	256.04
Over 5 to 15 miles	768.62	256.04
Over 15 to 25 miles	768.62	256.04
Over 25 miles	768.62	256.04

C. Optional Features

	Monthly Rate	Nonrecurring Charge
(1) Multiplexing**		
DS1 to Voice: An arrangement that multiplexes a 1.544 Mbps circuit to 24 Voice Grade channels.		
-Per arrangement	$1,209.34	None
DS1 to Digital: An arrangement that multiplexes a 1.544 Mbps channel to 24 channels for use with digital data channels.***		
-Per arrangement	1,209.34	None

* The additional local channel monthly rate and the Nonrecurring Charge apply to High Capacity services installed between the same locations as the initial channel.

** In addition to the monthly multiplexing charge, a transmission function charge must be applied to each loop derived from the multiplexing arrangement. These transmission function rates appear in Pa. P.U.C. No. 304.

*** Digital Data channels are only available from the serving wire center serving the Telephone Company-designated Digital Hub. Digital Data on DS1 is used only as a component of DA1-4.

HIGH CAPACITY SERVICES

E. Rates and Charges⊗ (Cont'd)

1. High Capacity (HC) Service (1.544 Mbps) (Cont'd)

C. Optional Features

(1) Multiplexing (Cont'd)

	Monthly Rate	Nonrecurring Charge
(1) Digital Data Multiplexing (DS1-DS0)		
- Multiplexing Unit: An arrangement that provides a 1.544 Mbps capacity to multiplex on a digital time division basis, twenty-three 64 Kbps channels.		
- Per Unit	826.00	$254.00
- Multiplexing		
- Per 64 Kbps channel equipped*	20.00	234.00
- Sub-Multiplexing Unit: An arrangement that provides a 64 Kbps capacity to multiplex on a digital time division basis, sub-speed Digital Data Services		
- Per Unit		
- 20 2.4 Kbps services	365.00	183.00
- 10 4.8 Kbps services	193.00	183.00
- 5 9.6 Kbps services	104.00	183.00
DS1 to Digital		
- Multiplexing Unit: DS1 to Digital Data; Refer to the High Capacity Multiplexing Unit in 6.7 (E)(1)		
- Multiplexing Plug-ins		
- Per 64 Kbps channel equipped*	14.00	31.00

* Required with DS1 to Digital Data channels Hub multiplexing capability.

E. Rates and Charges⊗ (Cont'd)

1. High Capacity (HC) Service (1.544 Mbps) (Cont'd)

C. Optional Features (Cont'd)

	Monthly Rate	Nonrecurring Charge Initial	Nonrecurring Charge Subsequent
(2) Automatic Loop Transfer Switching equipment placed at both ends of a duplicate standby service to automatically switch the standby service to the active state in the event of service failure. Duplicate 1.544 Mbps Service must also be ordered. - Per Arrangement	ICB	ICB	ICB
(3) Extended Super Frame	ICB	ICB	ICB
(4) Clear Channel Capability	ICB	ICB	ICB

HIGH CAPACITY SERVICES

HIGH CAPACITY SERVICES

E. Rates and Charges⊗ (Cont'd)

2. High Capacity - (44.736 Mbps)/Lightwave Service

	Monthly Rate	Nonrecurring Charge Initial	Nonrecurring Charge Subsequent
Per service provided	ICB	ICB	ICB

3. Volume Term Pricing Plans

(A) Plan # 1

	Monthly 2-Year Rate	Monthly 3-Year Rate	Monthly 5-Year Rate
High Capacity - (1.544 Mbps)			
DS1 Local Channel:			
Cell 1	$2,109.36	$2,044.76	$1,937.12
Cell 2	2,260.04	2,190.86	2,075.50
Cell 3	2,410.66	2,336.86	2,213.84
Cell 4	2,712.00	2,629.04	2,490.68
Fixed Mileage	753.22	730.24	691.80
Per mile	243.32	230.46	204.94

(B) Plan # 2

High Capacity - (1.544 Mbps) (Local Channel)			
Cell 1	$2,087.82	$1,980.16	$1,872.52
Cell 2	2,236.94	2,121.62	2,006.32
Cell 3	2,386.14	2,263.02	2,140.16
Cell 4	2,684.34	2,546.02	2,407.66
Fixed Mileage	745.64	707.14	668.64
Per mile	235.62	222.80	197.18

(C) Plan # 3

High Capacity - (1.544 Mbps)			
DS1 Local Channel			
Cell 1	$2,044.76	$1,937.12	$1,829.52
Cell 2	2,190.86	2,075.50	1,960.28
Cell 3	2,336.86	2,213.84	2,090.90
Cell 4	2,629.04	2,490.68	2,352.30
Fixed Mileage	730.24	691.80	653.30
Per mile	230.46	217.70	192.00

HIGH CAPACITY SERVICES

F. High Capacity 1.544 Mbps Digital Service - DS0 to DS1 Upgrade

1. General

DS0 to DS1 Upgrade is only available to existing Verizon customers who are upgrading an existing DS0 service to a High Capacity 1.544 Mbps Digital Service. Except as otherwise provided within High Capacity 1.544 Mbps Digital Service – DS0 to DS1 Upgrade of the Product Guide, the regulations applicable to Special Services under Section 34 of this Product Guide apply. Customers that purchase this service cannot make moves or adds subsequent to the initial upgrade as described in 2.(B).2. below and continue to receive the special pricing. Extended Superframe Format (ESF) and Clear Channel are the only optional features available under this program.

2. Description

(A) The 1.544 Mbps channel is provided as a single, flat rated, transport service. Verizon Central Office (CO) multiplexing and alternate serving wire center options are not available for High Capacity 1.544 Mbps Digital Service - DS0 to DS1 Upgrades.

(B) High Capacity 1.544 Mbps Digital Service - DS0 to DS1 Upgrade is provided on a two point basis only between a customer designated premises and customer designated premises.

1. Customer premise to wire center is not permitted. DS1 as a derived circuit from a higher level facility is not permitted.

2. At least one end point of the DS1 Upgrade must be the same as one of the existing end points of the disconnected DS0 service.

(C) High Capacity 1.544 Mbps Digital Service – DS0 to DS1 Upgrade requires a one for one replacement, 1 DS0 for 1 DS1 and disconnect of the DS0 service.

3. Minimum Period

The minimum service period is one month.

4. Application of Rates and Charges

(A) Service Charges apply as appropriate.

(B) Flat rate transport - The service is provided as flat rate, transport from premise to premise. Inclusive of this flat rate, the customer will receive a channel termination at each designated customer location -- for a total of two channel terminations -- as well as any IOF which may apply.

(C) Clear Channel Capability – Non Recurring Rates will apply.

HIGH CAPACITY SERVICES

F. High Capacity 1.544 Mbps Digital Service - DS0 to DS1 Upgrade (Cont'd)

4. Application of Rates and Charges (Cont'd)

(D) Optional Features

	Installation Charge	Per Month
1. Clear Channel Capacity		
Per Digital High Capacity 1.544 Mbps two point circuit- installed subsequent to the installation of Service	$603.00	
2. Per High Capacity 1.544 Mbps/ DS0 -to-DS1 Upgrade		
Point-to-point transport (customer-designated location to customer-designated location)		$189.00