



CP EDI 410 Guidelines (Version 4010)





# 410 Rail Carrier Freight Details and Invoice

Functional Group ID=IR

## Introduction:

This Draft Standard for Trial Use contains the format and establishes the data contents of the Rail Carrier Freight Details and Invoice Transaction Set (410) for use within the context of an Electronic Data Interchange (EDI) environment. The 410 version 4010 is sent from CP to the freight payer. The transaction set can be used to provide detailed information of charges associated with a rail movement.

An EDI 997 Acknowledgment is required for this transaction set.

CP Attributes	Pos. No.	Seg. ID	Name	Req. Des.	Max. Use	Loop Repeat	Notes and Comments
M	010	<u>ST</u>	Transaction Set Header	M	1		
M	020	<u>B3B</u>	Beginning Segment for Carrier's Invoice	M	1		
M	030	<u>C4</u>	Alternate Amount Due	O	1		
O	040	<u>N9</u>	Reference Identification	O	30		
Not Used	045	CM	Cargo Manifest	O	2		
Not Used	047	NTE	Note/Special Instruction	O	2		
LOOP ID - N7						500	
M	050	<u>N7</u>	Equipment Details	M	1		
O	060	<u>VC</u>	Motor Vehicle Control	O	21		
Not Used	070	G4	Scale Identification	O	1		
Not Used	080	M7	Seal Numbers	O	5		
O	090	<u>N5</u>	Equipment Ordered	O	1		
Not Used	100	IC	Intermodal Chassis Equipment	O	1		
Not Used	110	IM	Intermodal Movement Information	O	1		
Not Used	120	M12	In-bond Identifying Information	O	1		
O	125	<u>GA</u>	Canadian Grain Information	O	15		
M	130	<u>N8</u>	Waybill Reference	M	499		
M	140	<u>F9</u>	Origin Station	M	1		
M	150	<u>D9</u>	Destination Station	M	1		
LOOP ID - N1						10	
M	160	<u>N1</u>	Name	O	1		
Not Used	165	N2	Additional Name Information	O	2		
O	170	<u>N3</u>	Address Information	O	2		
O	180	<u>N4</u>	Geographic Location	O	1		
Not Used	185	PER	Administrative Communications Contact	O	2		
Not Used	192	BL	Billing Information	O	12		
LOOP ID - S1						12	
Not Used	370	S1	Stop-off Name	O	1		
Not Used	380	S2	Stop-off Address	O	1		



Not Used	390	S9	Stop-off Station	O	1
M	400	<u>R2</u>	Route Information	O	13
Not Used	405	R9	Route Code	O	1
Not Used	420	PS	Protective Service Instructions	O	5
<b>LOOP ID - LX</b>					<b>25</b>
M	430	<u>LX</u>	Assigned Number	M	1
M	440	<u>L5</u>	Description, Marks and Numbers	M	15
<b>LOOP ID - L0</b>					<b>25</b>
M	460	<u>L0</u>	Line Item - Quantity and Weight	M	1
Not Used	465	MEA	Measurements	O	3
M	470	<u>L1</u>	Rate and Charges	M	10
Not Used	475	DTM	Date/Time Reference	O	2
O	480	<u>PI</u>	Price Authority Identification	O	30
<b>LOOP ID - T1</b>					<b>64</b>
Not Used	490	T1	Transit Inbound Origin	O	1
Not Used	500	T2	Transit Inbound Lading	O	30
Not Used	510	T3	Transit Inbound Route	O	12
Not Used	520	T6	Transit Inbound Rates	O	1
Not Used	530	T8	Free-form Transit Data	O	99
M	540	<u>L3</u>	Total Weight and Charges	M	1
Not Used	550	X7	Customs Information	O	2
M	570	<u>SE</u>	Transaction Set Trailer	M	1



Segment: **ST** Transaction Set Header  
 Position: 010  
 Loop:  
 Level:  
 Usage: Mandatory  
 Max Use: 1  
 Purpose: To indicate the start of a transaction set and to assign a control number  
 Syntax Notes:  
 Semantic Notes: The transaction set identifier (ST01) is used by the translation routines of the interchange partners to select the appropriate transaction set definition (e.g., 810 selects the Invoice Transaction Set).  
 Comments:

Data Element Summary

CP	Ref.	Data		
<u>Attributes</u>	<u>Des.</u>	<u>Element</u>	<u>Name</u>	<u>Attributes</u>
M	ST01	143	Transaction Set Identifier Code	M ID 3/3
			Code uniquely identifying a Transaction Set	
		410	Rail Carrier Freight Details and Invoice	
M	ST02	329	Transaction Set Control Number	M AN 4/9
			Identifying control number that must be unique within the transaction set functional group assigned by the originator for a transaction set	



Segment: **B3B** Beginning Segment for Carrier's Invoice  
 Position: 020  
 Loop:  
 Level:  
 Usage: Mandatory  
 Max Use: 1  
 Purpose: To transmit identifying numbers, dates, and other basic data relating to the transaction set

Syntax Notes:  
 Semantic Notes: 1 B3B03 is the billing date.  
 2 B3B05 is the payment due date.  
 3 B3B11 defines the currency used in the transaction.

Comments: The B3B09 default value is pounds.

Data Element Summary

CP	Ref.	Data	Attributes	
<u>Attributes</u>	<u>Des.</u>	<u>Element</u>	<u>Name</u>	<u>Attributes</u>
M	B3B01	76	Invoice Number Identifying number assigned by issuer 9 digit CP invoice number.	M AN 1/22
M	B3B02	146	Shipment Method of Payment Code identifying payment terms for transportation charges CC Collect PP Prepaid (by Seller)	M ID 2/2
M	B3B03	373	Invoice Date Date expressed as CCYYMMDD CP's invoice date.	M DT 8/8
M	B3B04	193	Net Amount Due Total charges to be paid by the receiver of this transaction set expressed in the standard monetary denomination for the currency specified Amount of \$980.55 is 98055	M N2 1/12
M	B3B05	373	Invoice Due Date Date expressed as CCYYMMDD Invoice Due Date.	O DT 8/8
M	B3B06	140	Standard Carrier Alpha Code Standard Carrier Alpha Code CPRS SCAC Code for Canadian Pacific Railway	M ID 2/4
M	B3B07	91	Transportation Method/Type Code Code specifying the method or type of transportation for the shipment R Rail X Intermodal (Piggyback)	M ID 1/2
O	B3B08	145	Shipment Identification Number Identification number assigned to the shipment by the shipper that uniquely identifies the shipment from origin to ultimate destination and is not subject to modification; (Does not contain blanks or special characters) CP Invoice number same as B3B01	O AN 1/30



Not Used	B3B09	188	Weight Unit Code	O	ID 1/1
			Refer to 004010 Data Element Dictionary for acceptable code values.		
Not Used	B3B10	202	Correction Indicator	O	ID 2/2
			Refer to 004010 Data Element Dictionary for acceptable code values.		
O	B3B11	100	Currency Code	O	ID 3/3
			Code (Standard ISO) for country in whose currency the charges are specified		
			CAD	Canadian Dollars	
			USD	U.S Dollars	

Segment: **C4** Alternate Amount Due  
 Position: 030  
 Loop:  
 Level:  
 Usage: Optional (Must Use)  
 Max Use: 1  
 Purpose: To specify alternate payment  
 Syntax Notes:  
 Semantic Notes:  
 Comments:

Data Element Summary

<u>CP</u>	<u>Ref.</u>	<u>Data</u>	<u>Name</u>	<u>Attributes</u>
<u>Attributes</u>	<u>Des.</u>	<u>Element</u>		
M	C401	100	Currency Code	M ID 3/3
			Code (Standard ISO) for country in whose currency the charges are specified	
			CAD	Canadian Dollars
M	C402	193	Net Amount Due	M N2 1/12
			Total charges to be paid by the receiver of this transaction set expressed in the standard monetary denomination for the currency specified	
			Amount of \$980.55 is 98055	
			Net Amount Due is reported in CAD dollars.	



Segment: **N9** Reference Identification  
 Position: 040  
 Loop:  
 Level:  
 Usage: Optional  
 Max Use: 30  
 Purpose: To transmit identifying information as specified by the Reference Identification Qualifier  
 Syntax Notes: At least one of N902 or N903 is required.  
 Semantic Notes:  
 Comments:

Data Element Summary

CP	Ref.	Data		
<u>Attributes</u>	<u>Des.</u>	<u>Element</u>	<u>Name</u>	<u>Attributes</u>
M	N901	128	Reference Identification Qualifier	M ID 2/3
			Code qualifying the Reference Identification	
			BM	Bill of Lading Number
			BN	Booking Number
			CN	Carrier's Reference Number (PRO/Invoice)
			CO	Customer Order Number
			MB	Master Bill of Lading
			PO	Purchase Order Number
			SI	Shipper's Identifying Number for Shipment (SID)
				A unique number (to the shipper) assigned by the shipper to identify the shipment
			SO	Shipper's Order (Invoice Number)
			WO	Work Order Number
				Number assigned for work including material and labor beyond normal work required to fulfill a service order
			ZZ	Mutually Defined
			This is not a comprehensive list and only includes some of the most commonly used Reference Identification Qualifiers.	
X	N902	127	Reference Identification	X AN 1/30
			Reference information as defined for a particular Transaction Set or as specified by the Reference Identification Qualifier	
X	N903	369	Free-form Description	X AN 1/45
			Free-form descriptive text	
O	N904	373	Date	O DT 8/8
			Date expressed as CCYYMMDD	
Not Used	N905	337	Time	X TM 4/8
Not Used	N906	623	Time Code	O ID 2/2
			Refer to 004010 Data Element Dictionary for acceptable code values.	
Not Used	N907	C040	Reference Identifier	O
			To identify one or more reference numbers or identification numbers as specified by the Reference Qualifier	



Not Used	C04001	128	Reference Identification Qualifier Code qualifying the Reference Identification Refer to 004010 Data Element Dictionary for acceptable code values.	M	ID 2/3
Not Used	C04002	127	Reference Identification Reference information as defined for a particular Transaction Set or as specified by the Reference Identification Qualifier	M	AN 1/30
Not Used	C04003	128	Reference Identification Qualifier Code qualifying the Reference Identification Refer to 004010 Data Element Dictionary for acceptable code values.	X	ID 2/3
Not Used	C04004	127	Reference Identification Reference information as defined for a particular Transaction Set or as specified by the Reference Identification Qualifier	X	AN 1/30
Not Used	C04005	128	Reference Identification Qualifier Code qualifying the Reference Identification Refer to 004010 Data Element Dictionary for acceptable code values.	X	ID 2/3
Not Used	C04006	127	Reference Identification Reference information as defined for a particular Transaction Set or as specified by the Reference Identification Qualifier	X	AN 1/30





Segment: **N7** Equipment Details  
 Position: 050  
 Loop: N7 Mandatory  
 Level:  
 Usage: Mandatory  
 Max Use: 1  
 Purpose: To identify the equipment  
 Syntax Notes: 1 If either N703 or N704 is present, then the other is required.  
 2 If either N705 or N716 is present, then the other is required.  
 3 If either N708 or N709 is present, then the other is required.  
 Semantic Notes:  
 Comments: N701 is mandatory for rail transactions.

Data Element Summary

CP	Ref.	Data		
<u>Attributes</u>	<u>Des.</u>	<u>Element</u>	<u>Name</u>	<u>Attributes</u>
M	N701	206	Equipment Initial Prefix or alphabetic part of an equipment unit's identifying number	O AN 1/4
M	N702	207	Equipment Number Sequencing or serial part of an equipment unit's identifying number (pure numeric form for equipment number is preferred)	M AN 1/10
X	N703	81	Weight Numeric value of weight	X R 1/10
X	N704	187	Weight Qualifier Code defining the type of weight N Actual Net Weight	X ID 1/2
X	N705	167	Tare Weight Weight of the equipment	X NO 3/8
O	N706	232	Weight Allowance Allowance made for increased weight due to such factors as snow	O NO 2/6
Not Used	N707	205	Dunnage	O NO 1/6
X	N708	183	Volume Value of volumetric measure	X R 1/8
X	N709	184	Volume Unit Qualifier Code identifying the volume unit E Cubic Feet	X ID 1/1
Not Used	N710	102	Ownership Code Refer to 004010 Data Element Dictionary for acceptable code values.	O ID 1/1
O	N711	40	Equipment Description Code Code identifying type of equipment used for shipment CN Container RR Rail Car	O ID 2/2
Not Used	N712	140	Standard Carrier Alpha Code	O ID 2/4



Not Used	N713	319	Temperature Control	O	AN 3/6
Not Used	N714	219	Position	O	AN 1/3
O	N715	567	Equipment Length Length (in feet and inches) of equipment ordered or used to transport shipment (The format is FFFII where FFF is feet and II is inches; the range for II is 00 through 11)	O	N0 4/5
X	N716	571	Tare Qualifier Code Code identifying the type of tare Refer to 004010 Data Element Dictionary for acceptable code values.	X	ID 1/1
O	N717	188	Weight Unit Code Refer to 004010 Data Element Dictionary for acceptable code values.	O	ID 1/1
O	N718	761	Equipment Number Check Digit Number which designates the check digit applied to a piece of equipment	O	N0 1/1
Not Used	N719	56	Type of Service Code	O	ID 2/2
Not Used	N720	65	Height	O	R 1/8
Not Used	N721	189	Width	O	R 1/8
O	N722	24	Equipment Type Code identifying equipment type	O	ID 4/4
Not Used	N723	140	Standard Carrier Alpha Code	O	ID 2/4
Not Used	N724	301	Car Type Code	O	ID 1/4



Segment: **VC** Motor Vehicle Control  
 Position: 060  
 Loop: N7 Mandatory  
 Level:  
 Usage: Optional  
 Max Use: 21  
 Purpose: To define motor vehicle identification and logistics  
 Syntax Notes:  
 Semantic Notes:  
 Comments:

Data Element Summary

CP	Ref.	Data		
<u>Attributes</u>	<u>Des.</u>	<u>Element</u>	<u>Name</u>	<u>Attributes</u>
M	VC01	539	Vehicle Identification Number Unique identification number stamped on the vehicle by the manufacturer	M AN 1/25
O	VC02	836	Vehicle Deck Position Code Code to identify the specific position of a vehicle on multi-level equipment; when dealing with rail cars the front end will be defined as that end of the rail car which the vehicle faces Refer to 004010 Data Element Dictionary for acceptable code values.	O ID 2/2
O	VC03	837	Vehicle Type Code Vehicle Type Code for freight rate and claims purposes 1 Automobile 2 Truck	O ID 1/1
O	VC04	838	Dealer Code A code assigned by a manufacturer to identify their dealers	O AN 2/9
Not Used	VC05	1	Route Code	O AN 1/13
Not Used	VC06	839	Bay Location	O AN 1/6
Not Used	VC07	833	Automotive Manufacturers Code	O ID 2/2
Not Used	VC08	308	Damage Exception Indicator Refer to 004010 Data Element Dictionary for acceptable code values.	O ID 1/1
Not Used	VC09	835	Supplemental Inspection Code Refer to 004010 Data Element Dictionary for acceptable code values.	O ID 1/1
Not Used	VC10	583	Factory Car Order Number	O AN 6/10
Not Used	VC11	877	Vessel Stowage Location	O AN 1/12



Segment: **N5** Equipment Ordered  
 Position: 090  
 Loop: N7 Mandatory  
 Level:  
 Usage: Optional  
 Max Use: 1  
 Purpose: To specify carrier equipment  
 Syntax Notes:  
 Semantic Notes:  
 Comments:  
 Notes: Used to report type and length of an Intermodal Equipment.

Data Element Summary

CP	Ref.	Data		
<u>Attributes</u>	<u>Des.</u>	<u>Element</u>	<u>Name</u>	<u>Attributes</u>
O	N501	567	Equipment Length	O N0 4/5
			Length (in feet and inches) of equipment ordered or used to transport shipment (The format is FFFII where FFF is feet and II is inches; the range for II is 00 through 11)	
		2000	20ft Equipment	
		4000	40ft Equipment	
		4500	45ft Equipment	
		5300	53ft Equipment	
Not Used	N502	233	Weight Capacity	O N0 2/3
Not Used	N503	203	Cubic Capacity	O N0 2/4
Not Used	N504	301	Car Type Code	O ID 1/4
Not Used	N505	216	Metric Qualifier	O ID 1/1
			Refer to 004010 Data Element Dictionary for acceptable code values.	
Not Used	N506	65	Height	O R 1/8
Not Used	N507	643	Lading Percentage	X N2 2/4
Not Used	N508	644	Lading Percent Qualifier	X ID 1/1
			Refer to 004010 Data Element Dictionary for acceptable code values.	
O	N509	40	Equipment Description Code	O ID 2/2
			Code identifying type of equipment used for shipment	
		CN	Container	



Segment: **GA** Canadian Grain Information  
 Position: 125  
 Loop: N7 Mandatory  
 Level:  
 Usage: Optional  
 Max Use: 15  
 Purpose: To transmit the transportation and distribution requirements of grain at Canadian ports  
 Syntax Notes:  
 Semantic Notes: 1 GA02 is required on the first occurrence of the segment and for each new occurrence of a different commodity code.  
 3 GA08 is used for the unload date.  
 Comments: 1 GA02 contains the Canadian Grain Commission Commodity Code for terminal elevator accounting.  
 2 GA05 is used for grain block number.

Data Element Summary

CP	Ref.	Data		
<u>Attributes</u>	<u>Des.</u>	<u>Element</u>	<u>Name</u>	<u>Attributes</u>
Not Used	GA01	1275	Fumigated/Cleaned Indicator Refer to 004010 Data Element Dictionary for acceptable code values.	O ID 1/1
O	GA02	22	Commodity Code Code describing a commodity or group of commodities	O AN 1/30
Not Used	GA03	1576	Inspected/Weighed Indicator Code Refer to 004010 Data Element Dictionary for acceptable code values.	O ID 1/2
O	GA04	128	Reference Identification Qualifier Code qualifying the Reference Identification GR Grain Order Reference Number	O ID 2/3
O	GA05	127	Reference Identification Reference information as defined for a particular Transaction Set or as specified by the Reference Identification Qualifier	O AN 1/30
Not Used	GA06	642	Week	O NO 4/4
O	GA07	899	Unload Terminal Elevator Code Code specifying the unloading terminal elevator at grain exporting terminals	O ID 3/4
O	GA08	373	Date Date expressed as CCYYMMDD	O DT 8/8
Not Used	GA09	1470	Number	O NO 1/9
Not Used	GA10	1276	Machine Separable Indicator Code	O ID 2/2
Not Used	GA11	1277	Canadian Wheat Board (CWB) Marketing Class Code Refer to 004010 Data Element Dictionary for acceptable code values.	O ID 1/1
Not Used	GA12	1278	Canadian Wheat Board (CWB) Marketing Class Type Code Refer to 004010 Data Element Dictionary for acceptable code values.	O ID 1/1
Not Used	GA13	1073	Yes/No Condition or Response Code Refer to 004010 Data Element Dictionary for acceptable code values.	O ID 1/1



Not Used	GA14	310	Location Identifier	X	AN 1/30
Not Used	GA15	156	State or Province Code	X	ID 2/2
Not Used	GA16	1004	Percent Qualifier	X	ID 1/2
			Refer to 004010 Data Element Dictionary for acceptable code values.		
Not Used	GA17	954	Percent	X	R 1/10

Segment: **N8** Waybill Reference  
 Position: 130  
 Loop:  
 Level:  
 Usage: Mandatory  
 Max Use: 499  
 Purpose: To identify the waybill and to specify the equipment used and the destination details  
 Syntax Notes: 1 If either N808 or N809 is present, then the other is required.  
 2 If either N810 or N811 is present, then the other is required.  
 Semantic Notes: 1 N802 is the waybill date.  
 2 N808 is the destination station of movement.  
 3 N810 will contain destination railroad initial Standard Carrier Alpha Code (SCAC).  
 4 N811 will contain railroad destination Freight Station Accounting Code (FSAC).  
 Comments: 1 Waybill type should be transmitted only when the transaction set involves a multiple Car/TOFC/COFC shipment or a conveying flat car. Waybill type should not be sent on a single Car/TOFC/COFC.

Data Element Summary

CP	Ref.	Data		Attributes
<u>Attributes</u>	<u>Des.</u>	<u>Element</u>	<u>Name</u>	<u>Attributes</u>
M	N801	186	Waybill Number	M NO 1/6
			Carrier accounting number of the waybill for the inbound movement	
M	N802	373	Date	M DT 8/8
			Date expressed as CCYYMMDD	
Not Used	N803	231	Cross Reference Type Code	X ID 1/1
			Refer to 004010 Data Element Dictionary for acceptable code values.	
Not Used	N804	206	Equipment Initial	X AN 1/4
Not Used	N805	207	Equipment Number	X AN 1/10
Not Used	N806	186	Waybill Number	X NO 1/6
Not Used	N807	373	Date	X DT 8/8
X	N808	19	City Name	X AN 2/30
			Free-form text for city name	
X	N809	156	State or Province Code	X ID 2/2
			Code (Standard State/Province) as defined by appropriate government agency	
X	N810	140	Standard Carrier Alpha Code	X ID 2/4
			Standard Carrier Alpha Code	
X	N811	573	Freight Station Accounting Code	X ID 1/5
			Code (Freight Station Accounting) (AAR Managed Code for Locations)	



Segment: **F9** Origin Station  
 Position: 140  
 Loop:  
 Level:  
 Usage: Mandatory  
 Max Use: 1  
 Purpose: To identify the rail origin of the shipment  
 Syntax Notes:  
 Semantic Notes:  
 1 F902 is the origin station for movement.  
 2 F908 is the Standard Point Location Code (SPLC) for the city named in the F902.  
 Comments:

## Data Element Summary

CP	Ref.	Data		
<u>Attributes</u>	<u>Des.</u>	<u>Element</u>	<u>Name</u>	<u>Attributes</u>
O	F901	573	Freight Station Accounting Code Code (Freight Station Accounting) (AAR Managed Code for Locations)	O ID 1/5
M	F902	19	City Name Free-form text for city name	M AN 2/30
M	F903	156	State or Province Code Code (Standard State/Province) as defined by appropriate government agency	M ID 2/2
Not Used	F904	26	Country Code	O ID 2/3
Not Used	F905	573	Freight Station Accounting Code	O ID 1/5
Not Used	F906	19	City Name	O AN 2/30
Not Used	F907	156	State or Province Code	O ID 2/2
Not Used	F908	154	Standard Point Location Code Code (Standard Point Location) defined by NMFTA point development group as the official code assigned to a city or point (for ratemaking purposes) within a city	O ID 6/9
Not Used	F909	116	Postal Code	O ID 3/15
Not Used	F910	154	Standard Point Location Code	O ID 6/9
Not Used	F911	116	Postal Code	O ID 3/15
Not Used	F912	26	Country Code	O ID 2/3



Segment: **D9** Destination Station  
 Position: 150  
 Loop:  
 Level:  
 Usage: Mandatory  
 Max Use: 1  
 Purpose: To identify the rail destination of the shipment  
 Syntax Notes:  
 Semantic Notes: 1 D902 is the destination station of movement.  
 2 D908 is the Standard Point Location Code (SPLC) for the city named in the D902.  
 Comments:

Data Element Summary

CP	Ref.	Data		
<u>Attributes</u>	<u>Des.</u>	<u>Element</u>	<u>Name</u>	<u>Attributes</u>
O	D901	573	Freight Station Accounting Code Code (Freight Station Accounting) (AAR Managed Code for Locations)	O ID 1/5
M	D902	19	City Name Free-form text for city name	M AN 2/30
M	D903	156	State or Province Code Code (Standard State/Province) as defined by appropriate government agency	M ID 2/2
Not Used	D904	26	Country Code	O ID 2/3
Not Used	D905	573	Freight Station Accounting Code	O ID 1/5
Not Used	D906	19	City Name	O AN 2/30
Not Used	D907	156	State or Province Code	O ID 2/2
Not Used	D908	154	Standard Point Location Code Code (Standard Point Location) defined by NMFTA point development group as the official code assigned to a city or point (for ratemaking purposes) within a city	O ID 6/9
Not Used	D909	116	Postal Code	O ID 3/15
Not Used	D910	154	Standard Point Location Code	O ID 6/9
Not Used	D911	116	Postal Code	O ID 3/15
Not Used	D912	26	Country Code	O ID 2/3





Segment: **N1** Name  
 Position: 160  
 Loop: N1 Optional (Must Use)  
 Level:  
 Usage: Optional (Must Use)  
 Max Use: 1  
 Purpose: To identify a party by type of organization, name, and code  
 Syntax Notes: 1 At least one of N102 or N103 is required.  
 2 If either N103 or N104 is present, then the other is required.  
 Semantic Notes:  
 Comments:

Data Element Summary

CP	Ref.	Data	Name	Attributes
<u>Attributes</u>	<u>Des.</u>	<u>Element</u>		
M	N101	98	Entity Identifier Code Code identifying an organizational entity, a physical location, property or an individual 11 Party to be billed(AAR Accounting Rule 11) C1 In Care Of Party no. 1 CN Consignee PF Party to Receive Freight Bill RI Remit To SH Shipper	M ID 2/3
X	N102	93	Name Free-form name	X AN 1/60
X	N103	66	Identification Code Qualifier Code designating the system/method of code structure used for Identification Code (67) 25 Carrier's Customer Code	X ID 1/2
X	N104	67	Identification Code Code identifying a party or other code CP Account number	X AN 2/80
Not Used	N105	706	Entity Relationship Code Refer to 004010 Data Element Dictionary for acceptable code values.	O ID 2/2
Not Used	N106	98	Entity Identifier Code Refer to 004010 Data Element Dictionary for acceptable code values.	O ID 2/3



Segment: **N3** Address Information  
 Position: 170  
 Loop: N1 Optional (Must Use)  
 Level:  
 Usage: Optional  
 Max Use: 2  
 Purpose: To specify the location of the named party  
 Syntax Notes:  
 Semantic Notes:  
 Comments:

## Data Element Summary

CP	Ref.	Data Element	Name	Attributes
<u>Attributes</u>	<u>Des.</u>			
M	N301	166	Address Information Address information	M AN 1/55
O	N302	166	Address Information Address information	O AN 1/55

Segment: **N4** Geographic Location  
 Position: 180  
 Loop: N1 Optional (Must Use)  
 Level:  
 Usage: Optional  
 Max Use: 1  
 Purpose: To specify the geographic place of the named party  
 Syntax Notes: 1 If N406 is present, then N405 is required.  
 Semantic Notes:  
 Comments: 1 A combination of either N401 through N404, or N405 and N406 may be adequate to specify a location.

## Data Element Summary

CP	Ref.	Data Element	Name	Attributes
<u>Attributes</u>	<u>Des.</u>			
O	N401	19	City Name Free-form text for city name	O AN 2/30
O	N402	156	State or Province Code Code (Standard State/Province) as defined by appropriate government agency	O ID 2/2
O	N403	116	Postal Code Code defining international postal zone code excluding punctuation and blanks (zip code for United States)	O ID 3/15
O	N404	26	Country Code Code identifying the country	O ID 2/3
Not Used	N405	309	Location Qualifier Refer to 004010 Data Element Dictionary for acceptable code values.	X ID 1/2
Not Used	N406	310	Location Identifier	O AN 1/30



Segment: **R2** Route Information  
 Position: 400  
 Loop:  
 Level:  
 Usage: Optional (Must Use)  
 Max Use: 13  
 Purpose: To specify carrier and routing sequences and details  
 Syntax Notes:  
 Semantic Notes:  
 Comments:

Data Element Summary

CP	Ref.	Data		
<u>Attributes</u>	<u>Des.</u>	<u>Element</u>	<u>Name</u>	<u>Attributes</u>
M	R201	140	Standard Carrier Alpha Code	M ID 2/4
			Standard Carrier Alpha Code	
M	R202	133	Routing Sequence Code	M ID 1/2
			Code describing the relationship of a carrier to a specific shipment movement	
			R Origin Carrier, Rule 11 Shipment	
			S Origin Carrier, Shipper's Routing (Rail)	
Not Used	R203	19	City Name	O AN 2/30
Not Used	R204	154	Standard Point Location Code	O ID 6/9
	R205	177	Intermodal Service Code	O ID 1/2
			Code identifying the Intermodal Service Plan	
Not Used	R206	91	Transportation Method/Type Code	O ID 1/2
			R Rail	
Not Used	R207	296	Intermediate Switch Carrier	X ID 2/4
Not Used	R208	296	Intermediate Switch Carrier	O ID 2/4
Not Used	R209	76	Invoice Number	O AN 1/22
Not Used	R210	373	Date	O DT 8/8
Not Used	R211	369	Free-form Description	O AN 1/45
Not Used	R212	56	Type of Service Code	O ID 2/2
			Refer to 004010 Data Element Dictionary for acceptable code values.	
O	R213	742	Route Description	O AN 1/35
			Point to point routing description	



Segment: LX Assigned Number  
 Position: 430  
 Loop: LX Mandatory  
 Level:  
 Usage: Mandatory  
 Max Use: 1  
 Purpose: To reference a line number in a transaction set  
 Syntax Notes:  
 Semantic Notes:  
 Comments:

Data Element Summary

CP	Ref.	Data		
<u>Attributes</u>	<u>Des.</u>	<u>Element</u>	<u>Name</u>	<u>Attributes</u>
M	LX01	554	Assigned Number	M NO 1/6
			Number assigned for differentiation within a transaction set	



Segment: **L5** Description, Marks and Numbers  
 Position: 440  
 Loop: LX Mandatory  
 Level:  
 Usage: Mandatory  
 Max Use: 15  
 Purpose: To specify the line item in terms of description, quantity, packaging, and marks and numbers  
 Syntax Notes: 1 If either L503 or L504 is present, then the other is required.  
 Semantic Notes:  
 Comments: 1 L502 may be used to send quantity information as part of the product description.

Data Element Summary

CP	Ref.	Data		
<u>Attributes</u>	<u>Des.</u>	<u>Element</u>	<u>Name</u>	<u>Attributes</u>
O	L501	213	Lading Line Item Number Sequential line number for a lading item	O NO 1/3
O	L502	79	Lading Description Description of an item as required for rating and billing purposes	O AN 1/50
X	L503	22	Commodity Code Code describing a commodity or group of commodities	X AN 1/30
X	L504	23	Commodity Code Qualifier Code identifying the commodity coding system used for Commodity Code T Standard Transportation Commodity Code (STCC)	X ID 1/1
Not Used	L505	103	Packaging Code Refer to 004010 Data Element Dictionary for acceptable code values.	O AN 3/5
Not Used	L506	87	Marks and Numbers	X AN 1/48
Not Used	L507	88	Marks and Numbers Qualifier Refer to 004010 Data Element Dictionary for acceptable code values.	O ID 1/2
Not Used	L508	23	Commodity Code Qualifier Refer to 004010 Data Element Dictionary for acceptable code values.	X ID 1/1
Not Used	L509	22	Commodity Code	X AN 1/30
Not Used	L510	595	Compartment ID Code Refer to 004010 Data Element Dictionary for acceptable code values.	O ID 1/1



Segment: **LO** Line Item - Quantity and Weight  
 Position: 460  
 Loop: L0 Mandatory  
 Level:  
 Usage: Mandatory  
 Max Use: 1  
 Purpose: To specify quantity, weight, volume, and type of service for a line item including applicable "quantity/rate-as" data  
 Syntax Notes: 1 If either L004 or L005 is present, then the other is required.  
 2 If either L008 or L009 is present, then the other is required.  
 3 If L011 is present, then L004 is required.  
 Semantic Notes: 1 L008 is the number of handling units of the line item tendered to the carrier.  
 2 L013 can only be used if the code in L009 is PLT, SKD, or SLP.  
 Comments:

Data Element Summary

CP	Ref.	Data		Attributes
<u>Attributes</u>	<u>Des.</u>	<u>Element</u>	<u>Name</u>	<u>Attributes</u>
O	L001	213	Lading Line Item Number Sequential line number for a lading item	O N0 1/3
Not Used	L002	220	Billed/Rated-as Quantity	X R 1/11
Not Used	L003	221	Billed/Rated-as Qualifier Refer to 004010 Data Element Dictionary for acceptable code values.	X ID 2/2
X	L004	81	Weight Numeric value of weight	X R 1/10
X	L005	187	Weight Qualifier Code defining the type of weight B Billed Weight	X ID 1/2
Not Used	L006	183	Volume	X R 1/8
Not Used	L007	184	Volume Unit Qualifier Refer to 004010 Data Element Dictionary for acceptable code values.	X ID 1/1
X	L008	80	Lading Quantity Number of units (pieces) of the lading commodity	X N0 1/7
X	L009	211	Packaging Form Code Code for packaging form of the lading quantity Refer to 004010 Data Element Dictionary for acceptable code values.	X ID 3/3
Not Used	L010	458	Dunnage Description	O AN 2/25
O	L011	188	Weight Unit Code Code specifying the weight unit E Metric Ton K Kilograms L Pounds	O ID 1/1
Not Used	L012	56	Type of Service Code Refer to 004010 Data Element Dictionary for acceptable code values.	O ID 2/2



Not Used	L013	380	Quantity	X	R 1/15
Not Used	L014	211	Packaging Form Code	O	ID 3/3
			Refer to 004010 Data Element Dictionary for acceptable code values.		
Not Used	L015	1073	Yes/No Condition or Response Code	X	ID 1/1
			Refer to 004010 Data Element Dictionary for acceptable code values.		

Segment: **L1** Rate and Charges  
 Position: 470  
 Loop: L0 Mandatory  
 Level:  
 Usage: Mandatory  
 Max Use: 10  
 Purpose: To specify rate and charges detail relative to a line item including freight charges, advances, special charges, and entitlements  
 Syntax Notes: 1 If either L102 or L103 is present, then the other is required.  
 2 At least one of L104 L105 or L106 is required.  
 Semantic Notes:  
 Comments:

Data Element Summary

CP	Ref.	Data		Attributes
<u>Attributes</u>	<u>Des.</u>	<u>Element</u>	<u>Name</u>	<u>Attributes</u>
M	L101	213	Lading Line Item Number	O N0 1/3
			Sequential line number for a lading item	
X	L102	60	Freight Rate	X R 1/9
			Rate that applies to the specific commodity	
X	L103	122	Rate/Value Qualifier	X ID 2/2
			Code qualifying how to extend charges or interpret value	
			PC Per Car	
			PW Percentage of Charges	
X	L104	58	Charge	X N2 1/12
			For a line item: freight or special charge; for the total invoice: the total charges -- expressed in the standard monetary denomination for the currency specified	
X	L105	191	Advances	X N2 1/9
			Incidental charges occurring during transportation which are not generally considered to be freight charges (examples - stop charges, diversion and consignment, icing) expressed in the standard monetary denomination for the currency specified	
X	L106	117	Prepaid Amount	X N2 1/9
			Money paid at point of origin (usually by shipper) expressed in the standard monetary denomination for the currency specified	
Not Used	L107	120	Rate Combination Point Code	O AN 3/9
			Refer to 004010 Data Element Dictionary for acceptable code values.	



O	L108	150	Special Charge or Allowance Code Code identifying type of special charge or allowance	O	ID 3/3
			CSE Customs Entry		
			CUS Customs Charge		
			ENC Energy charge		
			FUE Fuel Charge		
			GST Goods and Services Tax Charge		
			HST Harmonized Sales Tax		
			MSG Miscellaneous Charge		
			PST Postage		
			QST Quebec Sales Tax		
			SWC Switching Charge		
			This is not a comprehensive list and only includes some of the most commonly used Special Charge or Allowance Codes.		
Not Used	L109	121	Rate Class Code	O	ID 1/3
			Refer to 004010 Data Element Dictionary for acceptable code values.		
Not Used	L110	39	Entitlement Code	O	ID 1/1
			Refer to 004010 Data Element Dictionary for acceptable code values.		
Not Used	L111	16	Charge Method of Payment	O	ID 1/1
			Refer to 004010 Data Element Dictionary for acceptable code values.		
O	L112	276	Special Charge Description	O	AN 2/25
			Identification of special charge; this data element is used whenever an applicable code cannot be found in data element 150		
Not Used	L113	257	Tariff Application Code	O	ID 1/1
			Refer to 004010 Data Element Dictionary for acceptable code values.		
Not Used	L114	74	Declared Value	X	N2 2/12
Not Used	L115	122	Rate/Value Qualifier	X	ID 2/2
			Refer to 004010 Data Element Dictionary for acceptable code values.		
Not Used	L116	372	Lading Liability Code	O	ID 1/1
			Refer to 004010 Data Element Dictionary for acceptable code values.		
Not Used	L117	220	Billed/Rated-as Quantity	X	R 1/11
Not Used	L118	221	Billed/Rated-as Qualifier	X	ID 2/2
			Refer to 004010 Data Element Dictionary for acceptable code values.		
Not Used	L119	954	Percent	O	R 1/10
Not Used	L120	100	Currency Code	O	ID 3/3
Not Used	L121	610	Amount	O	N2 1/15





Segment: **PI** Price Authority Identification  
 Position: 480  
 Loop: L0 Mandatory  
 Level:  
 Usage: Optional  
 Max Use: 30  
 Purpose: To communicate basis of pricing, such as contract number, quote number, or tariff number

Syntax Notes:  
 Semantic Notes: PI07 is the price authority suffix for the contract.  
 Comments:

Data Element Summary

CP	Ref.	Data	Name	Attributes
<u>Attributes</u>	<u>Des.</u>	<u>Element</u>		
M	PI01	128	Reference Identification Qualifier Code qualifying the Reference Identification CT Contract Number TS Tariff Number	M ID 2/3
M	PI02	127	Reference Identification Reference information as defined for a particular Transaction Set or as specified by the Reference Identification Qualifier	M AN 1/30
O	PI03	436	Primary Publication Authority Code Code indicating type of external reference TP Tariff Publication	O ID 2/2
Not Used	PI04	930	Regulatory Agency Code	O ID 3/5
O	PI05	168	Tariff Agency Code Code defining the tariff bureau or tariff publishing agent that governs the rates applied to this shipment	O ID 1/4
O	PI06	965	Issuing Carrier Identifier Identification assigned by issuing carrier	O AN 1/10
O	PI07	660	Contract Suffix Used to identify a type of contract	O AN 1/2
Not Used	PI08	169	Tariff Item Number	O AN 1/16
Not Used	PI09	173	Tariff Supplement Identifier	O AN 1/4
Not Used	PI10	172	Tariff Section	O AN 1/2
Not Used	PI11	660	Contract Suffix	O AN 1/2
Not Used	PI12	373	Date	X DT 8/8
Not Used	PI13	373	Date	X DT 8/8
Not Used	PI14	629	Alternation Precedence Code Refer to 004010 Data Element Dictionary for acceptable code values.	O ID 1/1
Not Used	PI15	629	Alternation Precedence Code Refer to 004010 Data Element Dictionary for acceptable code values.	O ID 1/1



Segment: **L3** Total Weight and Charges  
 Position: 540  
 Loop:  
 Level:  
 Usage: Mandatory  
 Max Use: 1  
 Purpose: To specify the total shipment in terms of weight, volume, rates, charges, advances, and prepaid amounts applicable to one or more line items  
 Syntax Notes: If either L301 or L302 is present, then the other is required.  
 Semantic Notes: L305 is the total charges.  
 Comments:

Data Element Summary

CP	Ref.	Data	Name	Attributes
<u>Attributes</u>	<u>Des.</u>	<u>Element</u>		
X	L301	81	Weight Numeric value of weight	X R 1/10
X	L302	187	Weight Qualifier Code defining the type of weight B Billed Weight	X ID 1/2
Not Used	L303	60	Freight Rate	X R 1/9
Not Used	L304	122	Rate/Value Qualifier Refer to 004010 Data Element Dictionary for acceptable code values.	X ID 2/2
O	L305	58	Charge For a line item: freight or special charge; for the total invoice: the total charges -- expressed in the standard monetary denomination for the currency specified	O N2 1/12
O	L306	191	Advances Incidental charges occurring during transportation which are not generally considered to be freight charges (examples - stop charges, diversion and consignment, icing) expressed in the standard monetary denomination for the currency specified	O N2 1/9
O	L307	117	Prepaid Amount Money paid at point of origin (usually by shipper) expressed in the standard monetary denomination for the currency specified	O N2 1/9
Not Used	L308	150	Special Charge or Allowance Code Refer to 004010 Data Element Dictionary for acceptable code values.	O ID 3/3
Not Used	L309	183	Volume	X R 1/8
Not Used	L310	184	Volume Unit Qualifier Refer to 004010 Data Element Dictionary for acceptable code values.	X ID 1/1
Not Used	L311	80	Lading Quantity	O N0 1/7
Not Used	L312	188	Weight Unit Code Refer to 004010 Data Element Dictionary for acceptable code values.	O ID 1/1
Not Used	L313	171	Tariff Number	O AN 1/7
Not Used	L314	74	Declared Value	X N2 2/12
Not Used	L315	122	Rate/Value Qualifier Refer to 004010 Data Element Dictionary for acceptable code values.	X ID 2/2



Segment: **SE** Transaction Set Trailer  
 Position: 570  
 Loop:  
 Level:  
 Usage: Mandatory  
 Max Use: 1  
 Purpose: To indicate the end of the transaction set and provide the count of the transmitted segments (including the beginning (ST) and ending (SE) segments)

Syntax Notes:  
 Semantic Notes:  
 Comments: 1 SE is the last segment of each transaction set.

Data Element Summary

CP	Ref.	Data		
<u>Attributes</u>	<u>Des.</u>	<u>Element</u>	<u>Name</u>	<u>Attributes</u>
M	SE01	96	Number of Included Segments	M NO 1/10
			Total number of segments included in a transaction set including ST and SE segments	
M	SE02	329	Transaction Set Control Number	M AN 4/9
			Identifying control number that must be unique within the transaction set functional group assigned by the originator for a transaction set	



# SAMPLE 410s:

## Example 1- Intermodal

```

ISA*00*      *00*      *ZZ*CPRST      *ZZ*EXACUSLT410      *181214*1327*U*00401*000000183*0*T*:
GS*IR*CPRST*EXACUSLT410*20181214*1327*1830001*X*004010
ST*410*0001
B3B*709900000*PP*20181126*347333*20181211*CPRS*R*709900000***CAD
C4*CAD*347333
N9*VG*R100700000 (CPR)*GST
N9*CN*709900000**20181126
N9*BM*104000123**20181121
N7*CPPU*230000*29940*N*****CN****5300
N5*5300*****CN
N8*598088*20181121*****CALGARY IMS*AB*CPRS*08204
F9*03409*VAUGHAN IMS*ON
D9*08204*CALGARY IMS*AB
N1*PF*PAYER OF FREIGHT*25*0052020000
N3*1234 AVEBURY RD
N4*MISSISSAUGA*ON*L5R 3M3
N1*SH*SHIPPER NAME
N3*1234 AVEBURY RD
N4*MISSISSAUGA*ON*L5R3M3
N1*CN*CONSIGNEE NAME
N3*1212 10TH AVE NE
N4*CALGARY*AB*T2A2M3
N1*UC*ULTIMATE CONSIGNEE
N3*1212 10TH AVE NE
N4*CALGARY*AB*T2A2M3
N1*AE*DELIVERY LOCATION
N3*1212 10TH AVE NE
N4*CALGARY*AB*T2A2M3
N1*RI*CANADIAN PACIFIC RAILWAY COMPANY
N3*PO BOX 111*CA
N4*WINNIPEG*MB*R3C 2K3
R2*XX*S***20*****CPRS
LX*1
L5*1*CNT*4611110*T
L5*1*FAK*4611110*T
L0*1***29940*B***1*UNT**L
L1*1*2775*PC*277500**277500
L1*1*17.25*PW*47869**47869**FUE****FUEL SURCHARGE 17.25%
L1*1***425**425**MSG****AB CARBON SURCHARGE
L1*1***5000**5000**BLC****MANUAL ENTRY OF BOL
L1*1*5*PW*16539**16539**GST****TAX GST FED 5%
PI*CT*503000*TP**CPRS
PI*TS*000000*TP**CPRS*CPRS
PI*TS*0000001*TP**CPRS*FSC
L3*29940*B***325369*5425*325369
SE*44*0001
GE*1*1830001
IEA*1*000000183

```



Example 2- Carload

ISA\*00\* \*00\* \*ZZ\*CPRST \*ZZ\*SENDER \*181210\*1704\*U\*00401\*000000182\*0\*T\*:  
GS\*IR\*CPRST\*SENDER\*20181201\*1704\*1820001\*X\*004010  
ST\*410\*0001  
B3B\*61470000\*PP\*20181201\*345900\*20181215\*CPRS\*R\*614700000\*\*\*CAD  
C4\*CAD\*345900  
N9\*CR\*04029123  
N9\*CN\*61470000\*\*20181201  
N9\*BM\*04021111\*\*20181126  
N7\*CP\*200123\*195000\*N\*\*\*\*\*RR\*\*\*\*\*7300\*\*\*\*\*F483  
N8\*501000\*20181126\*\*\*\*\*DULUTH RICES POINT\*MN\*CPRS\*00821  
F9\*60667\*PERRY\*GA  
D9\*00821\*DULUTH RICES POINT\*MN  
N1\*PF\*PAYER OF FREIGHT\*25\*005202000  
N3\*2211 RIMLAND DRIVE  
N4\*BELLINGHAM\*WA\*98226  
N1\*SH\*SHIPPER NAME  
N3\*2211 RIMLAND DR  
N4\*BELLINGHAM\*WA\*98226  
N1\*CN\*CONSIGNEE NAME  
N3\*1122 PORT TERMINAL RD  
N4\*DULUTH\*MN\*55802  
N1\*11\*RULE 11  
N3\*2211 RIMLAND DR  
N4\*BELLINGHAM\*WA\*98226  
N1\*RI\*CANADIAN PACIFIC RAILWAY COMPANY  
N3\*8000 COLLECTION CENTER DR  
N4\*CHICAGO\*IL\*60693  
R2\*XX\*R\*\*\*\*\*NS CHGO CPRS  
LX\*1  
L5\*1\*PKG\*2421184\*T  
L5\*1\*LUMBER\*2421184\*T  
LO\*1\*\*\*195000\*B\*\*\*4640\*UNT\*\*L  
L1\*1\*3300\*PC\*330000\*\*330000\*\*\*\*\*CHICAGO TO DULRICPT  
L1\*1\*.26\*PM\*14797\*\*14797\*\*FUE\*\*\*\*FUEL SURCHARGE 569.1 MI  
PI\*TS\*0002300\*TP\*\*CPRS\*CPRS\*\*0000100100  
PI\*TS\*0000001\*TP\*\*CPRS\*FSC  
L3\*195000\*B\*\*\*345900\*\*345900  
SE\*36\*0001  
GE\*1\*1820001  
IEA\*1\*000000182