Payment Application

Overview

The payment application allows passengers to pay for their fares with credit, offline debit, or cash.

The following diagram describes the interaction between the MDT, PIM, and taximeter during a fare and the completion of payment for the fare:





Transactions

The payment application supports the following transactions:

- **Sale** For fare completion.
- Void For removing transactions from the batch, such as for incorrect data entry on tolls or tips.
- **Pre-authorization** For fares meeting TLC guidelines for long trips.

Sale

The sale transaction begins automatically when the driver ends the fare on the taximeter. The passenger can either pay with cash, in which case the transaction amount is stored in the cash batch for reporting purposes, or with credit/debit card, in which case IngeCab contacts the Apriva gateway for authorization.

Start of Fare

The following transaction flow shows the prompts from the driver's perspective when the driver starts the fare on the taximeter.

	MDT Display	Driver Action	IngeCab Action		
	12345678901234567890123456				
1.	Idle Prompt	Places TAXIMETER in HIRED – TIME ON mode.	TAXIMETER sends state change to indicate it is now in HIRED – TIME ON mode. Store date, time, and location. If TAXIMETER is in rate 5, go to step 2. Else, go to step 3.		
2.	Negotiated Fare: \$0.00	MDT 850: Use up arrow key to increase fare amount by \$0.25. Use down arrow key to decrease amount by \$0.25 Press [Enter] to continue. MDT 860: Enter fare amount using numeric keypad. Press [Enter] to continue.	 MDT 850: If up arrow key, increase fare amount by \$0.25 and update display. If down arrow key, decrease fare amount by \$0.25 and update display. If [Enter], send fare amount to TAXIMETER. MDT 860: On keypad press, update display with new fare amount. If [Enter], send fare amount. 		
			TAXIMETER.		
3.	Number of Passengers - 1 - 2 - 3 - 4	Selects number of passengers using hot keys.	Store number of passengers. If no response after timeout period, store number of passengers as 1 and go to step 4.		
4.	Idle Prompt	No action necessary.			

If the fare is a negotiated fare, the passenger will be able to accept or reject the fare amount on the PIM.

End of Fare - Driver Perspective

The following transaction flow shows the prompts from the driver's perspective when the driver ends the fare on the taximeter.

	MDT Display	Driver Action	IngeCab Action
	12345678901234567890123456		
1.	I di e Prompt	Places TAXIMETER in HIRED – TIME OFF mode.	 TAXIMETER sends state change to indicate it is now in HIRED – TIME OFF mode. Request fare and surcharge from TAXIMETER. Store date, time, and location. If geofencing is enabled, calculate tolls. Go to step 5. If geofencing is not enabled, go to step 2.
2.	Fare: \$8.00 Surcharge: \$0.50 Total: \$8.50 - Confirm Total - Add Tolls	If no tolls, select [Confirm Total] . If tolls, select [Add Tolls] .	If [Add Tolls] , go to step 3. If [Confirm Total] , go to step 6.
3.	Add Tolis: \$ 0.00	MDT 850: Use up arrow key to increase toll amount by \$0.25. Use down arrow key to decrease amount by \$0.25 Press [Enter] to continue. MDT 860: Enter toll amount using numeric keypad. Press [Enter] to continue.	MDT 850: If up arrow key, increase toll amount by \$0.25 and update display. If down arrow key, decrease toll amount by \$0.25 and update display. If [Enter], add toll to fare. MDT 860: On keypad press, update display with new toll amount. If [Enter], add toll to fare.
4.	Fare: \$8.00 SC: \$0.50 Toll: \$4.00 Total: \$12.50 - Confirm Total - Go Back	Select [Confirm Total] to accept the toll amount. Select [Go Back] to re-enter tolls.	If [Confirm Total] , go to step 5. If [Go Back] , set toll amount to \$0.00 and go to step 2.
5.	Fare: \$8.00 SC: \$0.50 Toll: \$4.00 Total: \$12.50 - Cash	If passenger pays by cash, select [Cash] using hot keys. If passenger pays by credit/debit no action. Total displays on PIM.	Wait cash timeout period before displaying cash option. If [Cash] or if passenger selects [Cash] on PIM, store total in cash batch. TAXIMETER or optional PRINTER prints cash receipt. Transaction is complete. Else, go to step 6 when passenger begins data entry on PIM.
6.	Fare: \$8.00 SC: \$0.50 Toll: \$4.00 Tip: \$2.00 Total: \$14.50 - Cancel Waiting for Passenger	No action necessary. At any time before contacting Apriva for authorization, driver can select [Cancel] using hot keys to cancel the passenger's input and return to step 5.	Update tip amount when passenger enters tip. If no response from passenger in 120 seconds, store total in cash batch. TAXIMETER or optional PRINTER prints cash receipt. Transaction is complete. If [Cancel] , go to step 5. Else, go to step 7 when passenger completes data entry.

	MDT Display	Driver Action	IngeCab Action
	Mor bisplay		Ingeous Action
7.	Waiting for Authorization	No action while IngeCab contacts Apriva for authorization.	IngeCab sends request message to Apriva gateway. If transaction is approved and is over \$25, go to step 12. If transaction is approved and is under \$25, go to step 11. If transaction is declined, go to step 10. If connection fails and transaction is over \$25, go to step 9. If connection fails and transaction is under \$25, go to step 8.
8.	Appr oved	Gives customer merchant copy receipt to sign. File signed merchant copy receipt. Give customer receipt.	Store transaction in Store and Forward batch. Store total in credit/debit totals. TAXIMETER or optional PRINTER prints customer receipts. Transaction is complete.
9.	Error - Retry - Cash	Drive until connection is established then select [Retry] to retry transaction. Select [Cash] if the passenger chooses to pay cash instead.	If [Retry] , go to step 7. If [Cash] , store total in cash totals. TAXIMETER or optional PRINTER prints cash receipt. Transaction is complete.
10.	Declined Payment Required - Credit/debit - Cash	Select [Credit/debit] if the passenger chooses to use another card. Select [Cash] if the passenger chooses to pay cash.	[Credit/debit] reads [Credit] if PIN PAD is not installed. If [Credit/debit], go to step 6. If [Cash], store total in cash totals. TAXIMETER or optional PRINTER prints cash receipt. Transaction is complete. Note: The TLC may not allow the driver to have control on a declined transaction.
11.	Approved No signature required.	Give customer receipt.	Store total in credit/debit totals. TAXIMETER or optional PRINTER prints customer receipt. Transaction is complete.
12.	Approved Signature required.	Gives customer merchant copy receipt to sign. File signed merchant copy receipt. Give customer receipt.	Store total in credit/debit totals. TAXIMETER or optional PRINTER prints merchant receipt then customer receipt. Transaction is complete.

End of Fare - Passenger Perspective

If the driver presses Cancel at any time during passenger data entry, the passenger transaction flow returns to step 1.

The following transaction flow shows the prompts from the passenger's perspective when the driver ends the fare on the taximeter.

	PIM Display	Passenger Action	IngeCab Action
1.	Fare:\$8.00Surcharge:\$0.50Tolls:\$4.00Total:\$12.50Select Payment Method[Cash] [Credit or Debit]	Swipe card to pay with credit or select [Credit or Debit] to pay with credit or offline debit. Select [Cash] or hand driver cash to pay with cash.	If [Cash] or if no response from passenger in PIM timeout time, store total in cash batch. TAXIMETER or optional PRINTER prints cash receipt. Transaction is complete. If passenger selects [Credit or Debit], go to step 2.
2.	Fare: \$8.00 Enter tip: Surcharge: \$0.50 [7][8][9] Tolls: \$4.00 [4][5][6] Ttotal: \$12.50 [1][2][3] Tip: \$2.00 [0] Total: \$14.50 Or select tip amount: [Back] [OK] [Cancel] 15% [\$1.30] 20% [\$1.70] 25% [\$2.10]	Select percentage, or enter tip amount using numeric keypad display. Press [2] [5] [0] to enter a \$2.50 tip. Press [OK] to accept tip amount.	Update tip and total amount on PIM as passenger keys in tip or selects a tip amount. If [OK] , add tip amount to total, go to step 3. If [Back] , go to step 1. If [Cancel] , go to step 1.
3.	Fare:\$8.00Please swipe card inSurcharge:\$0.50readerTolls:\$4.00subtotal:Subtotal:\$12.50Tip:\$2.00Total:\$14.50[Back][Cancel]	Swipe card. Press [Back] to return to the previous step. Press [Cancel] to return to step 1.	Read card and go to step 4. If [Back] , go to step 2. If [Cancel] , go to step 1.
4.	Fare:\$8.00Processing pleaseSurcharge:\$0.50waitTolls:\$4.00Subtotal:\$12.50Tip:\$2.00Total:\$14.50	No action while IngeCab contacts Apriva for authorization.	If transaction is approved and is under \$25, go to step 5. If transaction is approved and is over \$25, go to step 6. If connection fails and transaction is over \$25, go to step 7. If transaction is declined, go to step 8. If connection fails and transaction is under \$25, go to step 9.

	PIM Display		Passenger Action	IngeCab Action
5.	Fare: \$8.00 Surcharge: \$0.50 Tolls: \$4.00 Subtotal: \$12.50 Tip: \$2.00 Total: \$14.50	Thank You! A total of \$14.70 has been charged to your card. Please remember to take your receipt from the driver.	Driver gives passenger customer copy receipt.	Store total in credit/debit batch. TAXIMETER or optional PRINTER prints customer receipt. Transaction is complete.
6.	Fare: \$8.00 Surcharge: \$0.50 Tolls: \$4.00 Subtotal: \$12.50 Tip: \$2.00 Total: \$14.50	Thank You! A total of \$14.70 has been charged to your card. Please remember to take your receipt from the driver.	Driver gives passenger merchant copy receipt. Sign merchant copy and give to driver. Driver gives passenger customer copy receipt.	Store total in credit/debit batch. TAXIMETER or optional PRINTER prints merchant receipt then customer receipt. Transaction is complete.
7.	Fare: \$8.00 Surcharge: \$0.50 Tolls: \$4.00 Subtotal: \$12.50 Tip: \$2.00 Total: \$14.50	We're Sorry. There was an error processing your payment. Pay with cash.	Ask driver to drive until connection is established then retry transaction. Or pay with cash.	If passenger chooses to retry, driver drives around, then selects [Retry] on MDT. If passenger pays with cash, TAXIMETER or optional PRINTER prints cash receipt. Transaction is complete.
8.	Fare: \$8.00 Surcharge: \$0.50 Tolls: \$4.00 Subtotal: \$12.50 Tip: \$2.00 Total: \$14.50	We're Sorry. Your Transaction is Declined. [Try a Different Card] [Pay Cash]	To pay with another credit/debit card, press [Try a Different Card] . Or, to pay with cash, press [Pay Cash] or pay with cash.	If passenger presses [Try a Different Card] or] driver presses [Credit/debit] on MDT, go to step 1. If passenger presses [Pay Cash] or pays with cash, TAXIMETER or optional PRINTER prints cash receipt. Transaction is complete.
9.	Fare: \$8.00 Surcharge: \$0.50 Tolls: \$4.00 Subtotal: \$12.50 Tip: \$2.00 Total: \$14.50	Thank You! A total of \$14.70 has been charged to your card. Please remember to take your receipt from the driver.	Driver gives passenger merchant copy receipt. Sign merchant copy and give to driver. Driver gives passenger customer copy receipt.	Store transaction in Store and Forward batch. TAXIMETER or optional PRINTER prints customer receipts. Transaction is complete.

During payment, the PIM will also contain a prominent notice containing a list of all credit and debit cards accepted and the following statement: "Fares for all trips can be paid using the credit cards listed. No additional fee or surcharge applies to payment by credit or debit card."

Note: Passenger messages may be updated at the request of the TLC.

Note: Pre-recorded voice instructions matching the PIM instructions may be included.

Variables

Variable	Description	Default
Geofencing	Determines if geofencing is enabled. Valid values are:	0
	1 – Enabled	
PIN Debit	Determines if PIN debit is enabled. Valid values are: 0 – Disabled	0
	1 – Enabled	
Contactless	Determines if contactless payment is enabled. Valid	0
	values are:	
	0 – Disabled	
	1 – Enabled	
Start of Fare Timeout	Determines length of time in seconds to wait at number	10
	of passengers prompt before entering default number of	
	passengers during start of fare.	
Cash Timeout	Determines the length of time in seconds to wait before	10
	allowing the driver to select cash as the payment type	
	from the MDT.	
PIM Timeout	Determines the length of time in seconds to wait for a	120.
	response from the PIM on the select payment method	
	screen before defaulting to cash.	

Void

The void transaction allows the driver to remove the last authorized transaction from the batch.

The following table describes the process for entering a void transaction:

	MDT Display	Driver Action	IngeCab Action
1.	I di e Prompt	Select [Void Last] using hot keys.	Displays amount from last transaction.
2.	Fare: \$8.00 SC: \$0.50 Toll: \$4.00 Tip: \$2.00 Total: \$12.50 - Void - Cancel	Select [Void] to void the transaction. Select [Cancel] to cancel and return to idle.	If [Void] , go to step 3. If [Cancel] , transaction complete. Return to idle screen.
3.	Waiting for Authorization	No action while IngeCab contacts Apriva for authorization.	If transaction to be voided is in the store and forward batch, add void transaction to store and forward batch. Else, IngeCab sends Void transaction request to Apriva gateway. If connection fails, add transaction to store and forward batch.
4.	Void Complete Re-enter Transaction? - Yes - No	Select [Yes] to re-enter the transaction. Select [No] to return to idle screen.	If [No] , transaction is complete. Return to idle screen. If [Yes] , go to sale transaction End of Fare – Driver Perspective, step 6; End of Fare – Passenger Perspective, step 1.