# **Estimated Delivery Dates API**

The Estimated Delivery Date Suggestion API retrieves the Estimated Delivery Date (EDD) calculation for order items to display to customers on your storefront. In the case of STH and Delivery items, this request will suggest the optimal fulfillment location to assign it to based on your configured order routing rules and calculate its associated EDD. In the case of BOPIS items in which the customer has chosen a pickup location, the system will not go through routing logic to suggest an assignment location and will instead return the EDD for the chosen location.

The EDD Suggestion API is similar to the Suggest Routing endpoint, with some additional fields. Use the http.commerce.routing.eddsuggestion API Extensions to integrate with this API as needed, such as to display the estimated date on your storefront.

This documentation is supporting the Estimated Delivery Dates user guide until the full interactive API docs are updated, which will replace this page.

#### **Endpoint and Header**

The POST endpoint .../commerce/orders/orderRouting/api/v1/routing/edd/suggestion accepts order item information and customer shipping address to calculate the EDD, as defined in the following sections.

The following header parameter can be included:

Parameter	Data Type	Required	Description
returnSuggestionLog	boolean	no	If true, the response will include a log of the routing logic steps that led to the location suggestion. Defaults to false.

### **Required Request Fields**

The following parameters are required in the request body to perform a successful EDD request.

Parameter	Data Type	Description	
orderType	string	The type of order. This can be DIRECTSHIP, TRANSFER, STH_CONSOLIDATED, RETURN, DISPOSITION, DELIVERY, or BOPIS.	

Parameter	Data Type	Description		
total	number	The total cost of the order.		
eddItems	array	Array of order item data, with each entry being an object defining an item that the EDD should be calculated for. These order items are defined by the following fields.		
eddItems.orderItemID	integer	The unique ID of the order item.		
eddItems.partNumber	string	The part number of the order item.		
eddItems.sku	string	The SKU of the order item.		
eddItems.quantity	integer	The quantity of the item being ordered.		
eddItems.customItemData	object	Any custom data created for orders on your implementation if applicable, defined as key:value string pairs.		
eddItems.itemDependency	integer	Indicates another Order Item ID that you want assigned to the same location as this item.		
eddItems.backorderable	boolean	Indicates whether the item is allowed to be backordered or not.		
eddItems.productTitle	string	The title of the product as it appears in your catalog. This is optional.		
eddItems.taxable	boolean	Whether or not tax can be applied to this order item. This is optional.		
eddItems.weight	number	The weight measurement of the order item, used for packaging and shipping estimates. This uses your default measurement unit type. This is only required for Delivery.		
eddItems.length	number	The length measurement of the order item, used for packaging and shipping estimates. This uses your default measurement unit type. This is only required for Delivery.		

Parameter	Data Type	Description		
eddItems.width	number	The width measurement of the order item, used for packaging and shipping estimates. This uses your default measurement unit type. This is only required for Delivery.		
eddItems.height	number	The height measurement of the order item, used for packaging and shipping estimates. This uses your default measurement unit type. This is only required for Delivery.		
eddltems.tags	object	Any additional tags applied to the order item if applicable, defined as key:value string pairs.		
shippingAddress	object	The customer's address used for STH and Delivery orders (as well as to determine the closest location if a pickup location for BOPIS is not provided) as defined in the following fields. This is only required for STH and Delivery.		
shippingaddress.addressID	integer	The unique identifier of a saved address, if applicable.		
shippingaddress.customerID	integer	The unique identifier of the customer.		
shippingaddress.addressLine1	string	The first line of the customer's street address.		
shippingaddress.phone	string	The customer's phone number.		
shippingaddress.city	string	The city that the customer's address is located in.		
shippingaddress.state	string	The state that the customer's address is located in.		
shippingaddress.postalCode	string	The postal or zip code of the customer's address.		
shippingaddress.countryCode	string	The abbreviation of the country that the customer's address is located in.		
shippingaddress.latitude	number	The latitudinal coordinates of the shipping address, used to determine the closest fulfillment location(s).		

Parameter	Data Type	Description		
shippingaddress.longitude	number	The longitudinal coordinates of the shipping address, used to determine the closest fulfillment location(s).		

## **Optional Request Fields**

The following fields are also accepted by the API, which may help fine-tune routing accuracy.

Parameter	Data Type	Description
environmentID	integer	The unique identifier of the environment that the request is being made from.
isExpress	boolean	Whether or not this is an express order.
locationCodeWhiteList	array	An array of strings representing location codes that may be included in assignment.
exclusionListLocationCode	array	Array of objects representing locations that should be excluded from assignment of specific items, defined with an orderItemID integer and a locationCode string.
tags	object	Any additional tags applied to the order, defined as key:value string pairs.
extendedCustomerInfo	object	Additional customer details as defined in the following fields.
extendedCustomerInfo.customerId	string	The unique identifier of the customer.
extendedCustomerInfo.segments	array	An array of strings representing the Customer Segment IDs that this customer belongs to.

Parameter	Data Type	Description
extendedCustomerInfo.attributes	array	An array of custom attributes defined as an attributeFQN (string) and an array of attributeValues (strings).
extendedOrderInfo	object	Additional order details as defined in the following fields.
extendedOrderInfo.type	string	The type of the order.
extendedOrderInfo.orderID	string	The unique identifier of the order.
extendedOrderInfo.attributes	array	An array of custom attributes defined as an attributeFQN (string) and an array of attributeValues (strings).
pickupLocationCode	string	The location code of a BOPIS pickup location
inventoryRequestType	string	Can be ALL, ANY, PARTIAL, or ALL_STORES.
futureExclusionListLocationCode	array	Array of objects representing locations with future inventory that should be excluded from assignment, defined with an orderItemID integer and a locationCode string.
futureDateLimit	string	The date-time that is the latest allowed point of future inventory to consider.
sort	string	How to organize the response results. The only option is SUGGESTION_SORT.
externalResponseID	string	An External ID for the response.
orderID	integer	The unique identifier of the order.
cartID	integer	The unique identifier of the cart.
fraud	integer	The fraud score of the order.

Parameter	Data Type	Description
customData	object	Any custom data created for orders on your implementation, defined as key:value string pairs.
bundlingStrategy	string	The strategy used to bundle items. The only option is ITEM_DEPENDENCY.
forceSTHConsolidationOnSplitShipments	boolean	Whether or not to consolidate all split shipments at one fulfillment location.
sthConsolidationLocationOverride	string	A specific location designated to consolidate shipments at.
remorsePeriodInMinutes	integer	If a remorse period is being offered via Configurable Shipments feature, this is the amount of time it equates to. This will be added onto the processing time of an item.

## Sample Request

The following request would retrieve the EDD for three quantity of one STH order item.

```
{
  "items": [
     {
       "orderItemID": 1,
       "partNumber": null,
       "sku": null,
       "quantity": 3,
       "customItemData": null,
       "itemDependency": null,
       "backorderable": false,
       "upc": "L0693614"
     }
  ],
  "shippingAddress": {
     "addressID": null,
     "customerID": null,
     "addressLine1": "100 First Avenue",
     "phone": "(111) 222-3333",
     "city": "Calgary",
     "state": "AB"
     "postalCode": "AB T1Y 6M6",
     "countryCode": "CA",
    "latitude": 51.081550,
     "longitude": -113.990430
  },
  "orderType": "DIRECTSHIP",
  "futureDateLimit": "2026-08-22T00:00:00Z",
  "orderID": 20782,
  "total": 29.95
}
```

### **API** Response

The API should return a 200 OK response similar to the example below and the one returned by Suggest Routing, indicating the EDD for the optimal assignment location (or the BOPIS pickup location selected by the shopper) for each order item.

The estimatedDeliveryDates object includes both the EDD and the orderCutoffDate that indicates the latest time at which the order can be placed and still meet the expected EDD. This allows you to display messaging such as "Receive by February 28th if order placed by 3:00 PM today" on your storefront.

```
{
  "assignmentSuggestions": {
    "1": [
       {
          "orderItemID": 1,
          "locationID": 12345,
          "locationCode": "123",
          "quantity": 3,
          "route": "DIRECTSHIP",
          "futureDate": null,
          "futureDateString": null,
          "shipmentGroup": null,
          "data": null,
          "estimatedDeliveryDates": [
            {
               "estimatedDeliveryDate": "2025-02-28T00:002",
               "carrier": "UPS",
               "serviceType": "2Day",
               "orderCutoffDate": "2025-02-05T00:53:22Z"
            }
          ]
       }
    ]
  },
  "futureAssignmentSuggestions": {},
  "stateChangeSuggestions": {},
  "availableLocations": [],
  "emptyResponse": false
}
```