NIC Mississippi will serve as the single point of entry for all e-commerce transactions. Awarded vendor will use Mississippi's official payment processor for any of the following services where payment is required.

- Web services
- IVR services
- Mobile services
- Over the counter payment processing services
- Kiosk services
- Lock Box services

The following payment methods accepted through NIC Mississippi include: Visa, MasterCard, American Express, Discover, electronic check and subscription (monthly billed).

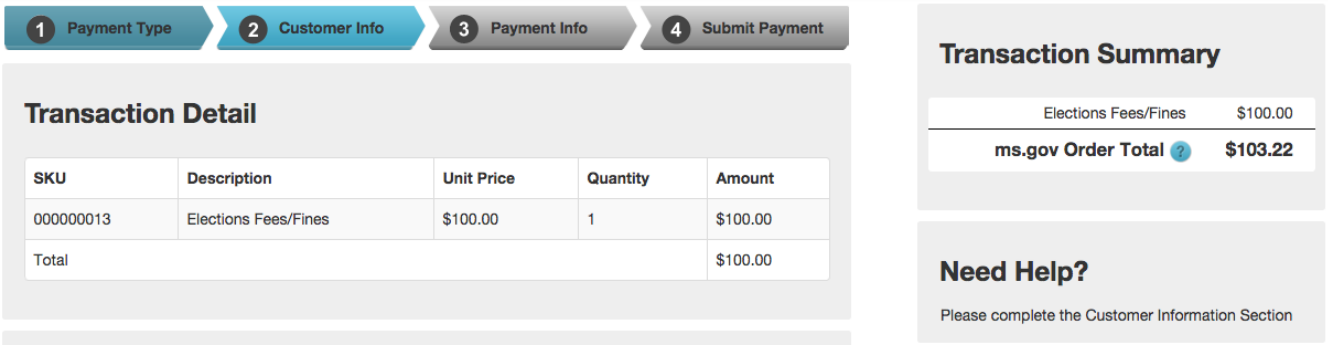
DFA Administrative Rule
The Department of Finance and Administration (DFA) established an administrative rule to be followed when agencies, in accordance with §27-104-33, Mississippi Code of 1972, Annotated, elect to accept payment by credit cards, charge cards, debit cards, electronic check (echeck) and other form of electronic payments for various services and fees collectible for agency purposes. See Attachment 1 for Final Rule.

Payment Card Industry (PCI) Compliance
NIC Mississippi will be responsible for Payment Card Industry (PCI) compliance on behalf of the State, though any future change in Federal PCI standards may require additional support from the State entity and awarded vendor. NIC Mississippi'sTransaction Processing Engine (TPE) is certified compliant with the PCI Data Security Standard (DSS) and compliant with the Payment Application Best Practices (PABP) standards. It is also listed as a Validated Payment Application by VISA. TPE is hosted at NIC's Central Data Center in Ashburn Virginia and complemented with a backup facility in Allen, Texas. NIC is certified by PCI-DSS as a Level 1 Service Provider for this environment.

See Technical Requirements for notes to the PCI compliance responsibility of the awarded vendor.

Awarded vendor is prohibited from breaking out payment processing fees associated with any transaction. This includes all pages of the application and/or any receipt generated.

Acceptable fee break out can include a "subtotal" for services and a "Total ms.gov Price" or "ms.gov Order Total" which includes the eGov processing fee. See image below for example.



Merchant of Record
In order to act as the single point of contact between the State, NIC Mississippi, the payment

processor, the merchant acquiring bank, and end users of ms.gov services, NIC Mississippi will be the "Merchant of Record" for this RFP. As the single point of contact for the State, NIC Mississippi will work directly with the processor and the acquiring bank to request and set up merchant accounts and will be responsible for all areas of merchant services, including merchant fees.

eGov Transaction Fees
There will be standard payment processing fees associated with each payment transaction. Customer approval (electronic or otherwise) of NIC Mississippi payment processing fees will be obtained prior to initiating payment.

MAGIC
NIC Mississippi's payment solution processes is integrated with MAGIC, Mississippi's statewide accounting and procurement system of record. At least three (3) weeks prior to service launch, Customer will be required to work with DFA to set up corresponding charges table entries. After appropriate edits are made to the charges table, Customer and awarded vendor will be required to work with NIC MISSISSIPPI to ensure adequate testing, confirming the application transactions are posting to MAGIC. A live transaction test must be completed no later than three (3) business days before service launch.

Refunds, Chargebacks, Returns
As the merchant of record and official payment processor, NIC Mississippi will handle all refunds, chargeback representments and returned echecks. However, NIC Mississippi is not responsible for covering any monies that must be netted from the agency's account through refund, successful chargeback or returned echeck. Below are the processes for each.

<u>Refunds</u>
The refund process is initiated by either customer or agency request.

- Upon customer request, NIC Mississippi will contact the agency financial contact (established at project initiation) for approval prior to refund.
- Agency contacts have access to and are encouraged to use the NIC Mississippi refund tool for their refund requests. This ensures adequate logs of all requested refunds.
- After agency request or approval, NIC Mississippi refunds the charge in TPE and notifies the requestor upon completion.
- Through MAGIC refunds are netted from the next day's deposits or the next day funds are available to net from.

<u>Chargebacks</u>
A chargeback is a monetary dispute that is initiated by the Issuing Bank (issuer disputes the posting of the transaction) or the cardholder (a cardholder disputes a transaction).

- Customer or card issuing bank sees what appears to be a suspicious charge on their statement.
- The customer contacts the card company to dispute the charge and initiate the chargeback process. Note: depending on the company policies of the company that issued the card the company may initiate the chargeback without customer notification.
- NIC Mississippi receives a chargeback email from our processor notifying us of the transaction details of the chargeback. Once this notification is received the processor pulls the funds back from the Portal account until supporting documentation is obtained. (NIC Mississippi's processor has 45 days from the time the customer disputes the charge to contact NIC Mississippi for additional information.)
- Based on the information provided in the chargeback notification, NIC Mississippi researches the charge internally first.

    - If the disputed charge is a true duplicate charge (same customer information, amount, etc.), NIC Mississippi allows the chargeback to process and it is automatically marked in TPE.
- If the charge is valid NIC Mississippi will provide the sales drafts (chargeback receipt, TPE receipts, agency support, etc.) back to the processor to support the charge validity.
- After the charge is verified through receipt of sales drafts the chargeback will be reversed and the funds will be deposited back to the agency.

Note: The chargeback process could take up to 60 days to resolve.

Returns

Electronic checks (echeck)/ACH payments (where a user enters an account and routing number) may be returned unpaid for any reason, including non-sufficient funds (NSF), stop payment, online data entry error or closed account. A full list of return codes is listed below:

- R01 - Insufficient Funds - Available balance is not sufficient to cover the dollar value of the debit entry.
- R02 - Account Closed - Previously active account has been closed by customer or RDFI.
- R03 - No Account/Unable to Locate Account - Account number structure is valid and passes editing process, but does not correspond to individual or is not an open account.
- R04 - Invalid Account Number - Account number structure not valid; entry may fail check digit validation or may contain an incorrect number of digits.
- R05 - Improper Debit to Consumer Account - A CCD, CTX, or CBR debit entry was transmitted to a Consumer Account of the Receiver and was not authorized by the Receiver.
- R06 - Returned per ODFI's Request - ODFI has requested RDFI to return the ACH entry (optional to RDFI – ODFI indemnifies RDFI).
- R07 - Authorization Revoked by Customer - Consumer, who previously authorized ACH payment, has revoked authorization from Originator (must be returned no later than 60 days from settlement date and customer must sign affidavit).
- R08 - Payment Stopped - Receiver of a recurring debit transaction has stopped payment to a specific ACH debit. RDFI should verify the Receiver's intent when a request for stop payment is made to insure this is not intended to be a revocation of authorization.
- R09 - Uncollected Funds - Sufficient book or ledger balance exists to satisfy dollar value of the transaction, but the dollar value of transaction is in process of collection (i.e., uncollected checks) or cash reserve balance below dollar value of the debit entry.
- R10 - Customer Advises Not Authorized - Consumer has advised RDFI that Originator of transaction is not authorized to debit account (must be returned no later than 60 days from settlement date of original entry and customer must sign affidavit).
- R11 - Check Truncation Entry Returned - used when returning a check safekeeping entry; RDFI should use appropriate field in addenda record to specify reason for return (i.e., "exceeds dollar limit," "stale date," etc.).
- R12 - Branch Sold to Another DFI - Financial institution receives entry destined for an account at a branch that has been sold to another financial institution.

Typical Return Process

- User enters echeck information in the ms.gov common checkout page
- TPE captures the information and sends to payment service provider
- The service provider submits a request to the payer’s bank to retrieve the funds
- Payer’s bank reports back one of the aforementioned return codes to the services provider
- Service provider notifies NIC Mississippi and the return is marked in TPE
- Funds are electronically pulled from the agency through the daily MAGIC payment interface file. NIC Mississippi contacts the individual(s) responsible for agency funds (contact obtained during project initiation) by email to let them know of the return and reason.

Hardware Acquisition
Due to the payment key injections required for hardware to be compatible with NIC Mississippi's PCI compliant payment processor, any hardware must be acquired through NIC Mississippi's existing eGov contract. This includes, but is not limited to, kiosks, pin pad/card swipe, mobile devices, etc.

Application Testing
For all new services DFA requires a test transaction to be run for flow of funds and processor verification. After NIC Mississippi receives confirmation the awarded vendor is satisfied with the integration, one test must be run through production TPE and confirmed by NIC Mississippi.

It takes three (3) business days (excluding bank holidays) for the transaction to be confirmed by DFA. Awarded vendor should take this time frame into consideration when anticipating launch date.

Reporting
TPE provides reporting and auditing tools useful for streamlining and accommodating various back-office procedures. TPE's financial reporting is comprehensive, flexible, and robust. Within TPE all payment processing data is made available via a wide variety of reporting features. Reports are real-time, up-to-the-minute transaction reporting ranging from summary reports to detail reports showing line-item level data. A comprehensive users guide and applicable training will be provided to agency contacts during integration.

Payment Support
NIC Mississippi will provide support for all user payment inquiries. NIC Mississippi is located at 2727 Old Canton Road, Suite 100, Jackson, Mississippi 39216 and customer payment support is available during normal business hours (Monday – Friday 8:00 a.m.-5:00 p.m. CST). NIC Mississippi's toll free support number (1-877-290-9487) is listed on the ms.gov Common Checkout page and is accessible to all users. For payment emergencies, a technical support cellular number will be provided to the State contact.

NIC Mississippi will work directly with the awarded vendor and/or the agencies to identify, report, track, monitor, escalate, and resolve any technical issues with TPE or CCP. It is NIC Mississippi's policy to notify all awarded vendors and agencies of planned maintenance windows or system updates to avoid any payment issues.

State entities and/or awarded vendors will not be charged for NIC Mississippi's efforts during payment implementation or any training/support.

Technical Requirements
Mississippi's payment solution is designed to provide two methods of integration: CommonCheckout (where the user clicks on a "Pay Now" button and is transferred to a set of common checkout pages branded for ms.gov), and DirectConnect (where the application has self-contained checkout pages and will call TPE for verification and capture once all payment information has been entered). In both of these instances, the awarded vendor will utilize standard web services protocols.

The CommonCheckout integration is required by ITS and DFA. Should special circumstances arise where the CommonCheckout is not applicable and/or the DirectConnect option is required, approval from both State agencies is mandatory.

High level descriptions of the integration requirements are included in this section. For detailed documentation please contact Spencer Jones, NIC Mississippi's Director of Technology, at spjones@egov.com.

CommonCheckout (CCP)
When utilizing CommonCheckout, the calling application is not responsible for collecting the credit card

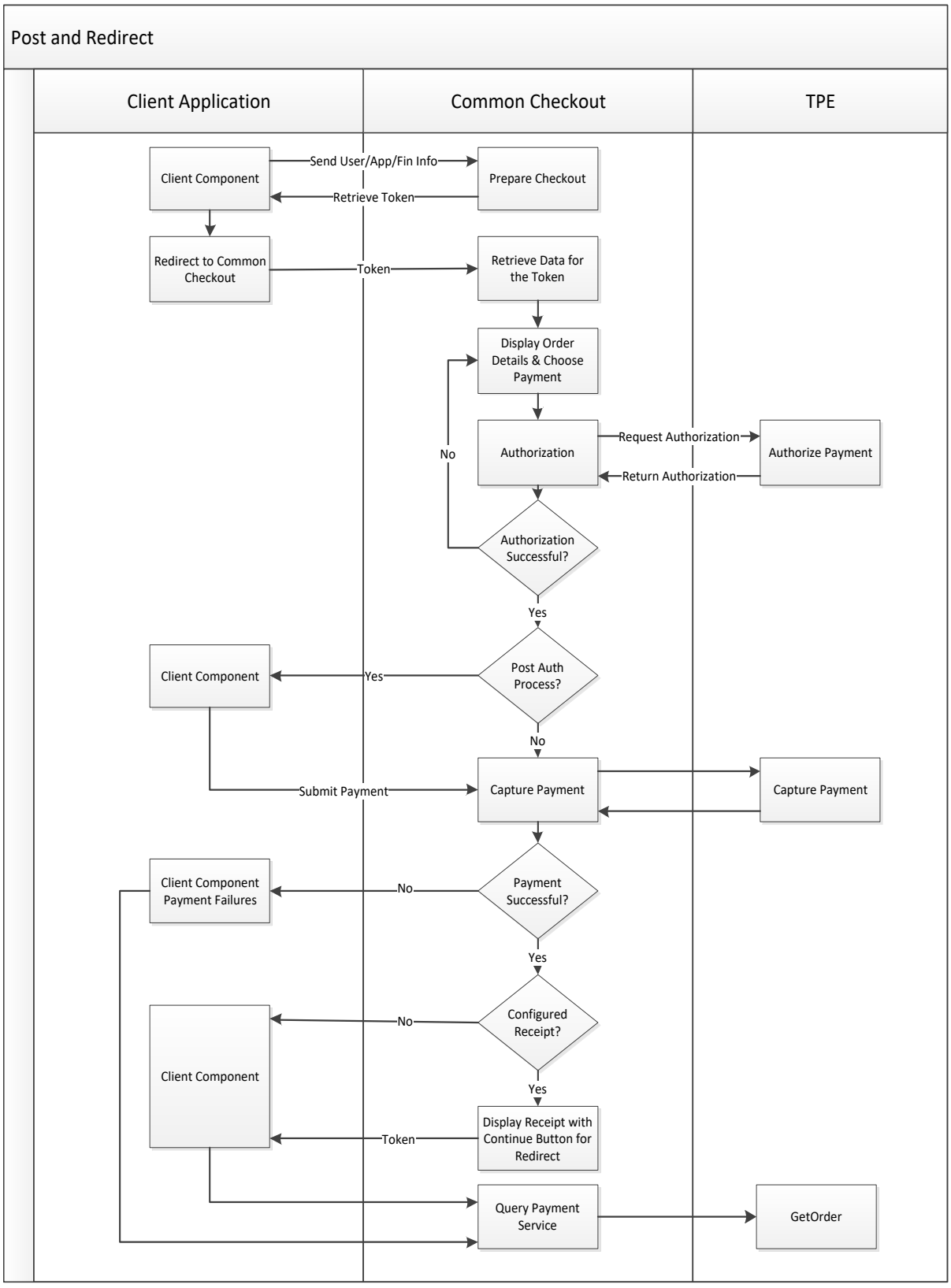
or banking information. Instead, the application sends the transaction data to the CommonCheckout interface which collects and processes all payment information. The CommonCheckout interface will then return to the calling application all transaction status details and information related to the transaction.

CCP Option 1: Server-side Web Service Calls and Browser-side Redirect

The partner application is required to invoke Prepare Checkout Operation on the Common Checkout web service that is passing along the financial/customer/application information.

- The Web Service operation returns a token back in the SOAP response. The token is required as a hidden field on the form post to the Common Checkout web application or a redirect.
- The Prepare Checkout Service returns the token back. This token is required as a hidden field on the form post or query string to the Common Checkout web application.
- When the customer chooses to continue with the payment by clicking a form button on the partner screen, the browser redirects to the Common Checkout web application.
- The Common Checkout web application retrieves the customer/financial/application data associated with the token and displays it on the payment page.
- Upon submission of the payment, Common Checkout redirects to the partner application or displays a receipt page, based on the configuration. In the latter case, the redirect to the partner application happens when a customer clicks a button on the receipt screen.
- The partner application is required to do a call back to the Query payment web service by sending the token. The service will return the transaction information back in the SOAP response. This ensures authenticity of the payment.

The following figure outlines a typical process flow for a CommonCheckout transaction.



CCP Option 2: Server-side Name-Value-Pair HTTPS Posts and Browser-side Redirect

The partner application is required to send the financial/customer/application information as multiple name/value pairs using HTTPS POST to the Prepare Checkout Post URL.

- The Prepare Checkout Service returns a token-based transaction identifier, which is required as a hidden field on the form post or query string to the Common Checkout web application.
- When the customer chooses to continue with the payment by clicking a form button on the partner screen, the browser is redirected to Common Checkout web application.
- The Common Checkout web application retrieves the customer/financial/application data for the transaction identified by the associated token and displays it on the payment page.
- Upon submission of the payment, Common Checkout redirects to the partner application or displays a receipt page, based on the configuration. In the latter case, the redirect to the partner application happens once a customer clicks a button on the receipt screen.
- The partner application requires a call back to the Query payment HTTP service by sending the token. The service returns the payment detail back as name value pairs. This ensures authenticity of the payment.

DirectConnect

The second scenario is to use the Application Programming Interfaces ("API's") that are available to developers. In this scenario, agency or third-party developers write applications that include the checkout pages. Customers fill out all payment information within the application, and once captured, the application communicates with TPE using a standard API. TPE processes the payment, based on payment type, and returns either a success or failure code back to the calling application. Based on the code, the calling application displays either a receipt back to the customer or the reason for the failure. TPE supports multiple API's including:

- Java
- .NET
- Perl
- PHP

Note: If the DirectConnect method is approved by ITS and DFA the awarded vendor must provide NIC Mississippi and the State proof of their software's (and any applicable hardware) PCI compliance.

DirectConnect Integration Outline

Before a payment can be processed inside of TPE, an *Order* must be established. An Order is the basic transaction container in TPE. It is a detailed request for certain goods or services and represents all the instructions and information needed from the customer for the merchant to collect money. An order contains information about the customer, items purchased, fees and taxes, payment information, billing address, shipping address, and so forth.

TPE uses the term *order*, along with the terms *payment* and *credit* to represent payment data for all electronic payments. An order is created by the client application while the customer is placing an order for goods or services. Transactions flow between the merchant and the financial institution during the life cycle of the order. These transactions can be broken into two broad categories: *payments* (monies transferred to the merchant from the customer) and *credits* (monies returned to the customer, such as when goods or services are returned and payment is refunded). As order processing continues, payments and credits are created and modified.

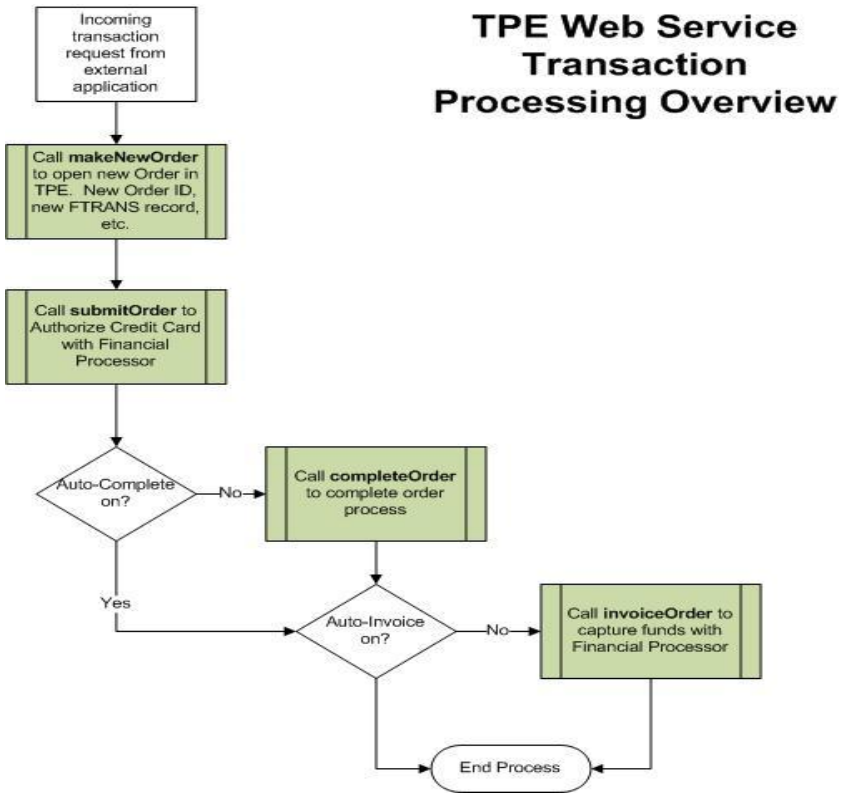
The basic steps for creating an Order and processing a payment are as follows:

1. Submit a new Order Request to TPE. The client application will create a request that includes a Merchant Id, a Merchant Key, and a Service Code. These are pre-defined security parameters that are configured within TPE. If the request is successful, TPE will return an empty order

container to the client application.

2. Inside of this container, the application will set the Payment Implement (Credit Card, ACH, Cash, etc.), customer payment information, billing information, transaction line items and amounts, and any other information necessary for processing the payment.
3. Submit the Order. Once the Order container has been filled by the calling application, it will be submitted for authorization. TPE will do preliminary validations on the Order before submitting it to the Merchant Service Provider for authorization. If there is an error with the Order, TPE will return that information back to client application, or it will return back that the authorization was successful.
4. Complete the Order. This call to TPE informs the system that the order is complete and ready to be invoiced.
5. Invoice the Order. This step is where money transfer (i.e., Capture) is initiated. The invoice takes the information from the Order, and is then submitted to the Merchant Service Provider for Capture/Settlement.

The following figure outlines a typical process flow for a Direct Connect transaction.



Charges Table Connection

The Mississippi Department of Information Technology Services (ITS) has developed the Mississippi Charges Web Service to supply application programs with data from the charges table. This data is required by the Agency application to build a valid NIC MISSISSIPPI electronic payment request. The item type, item description, and item cost for each item sold must be submitted in the transaction request for payment authorization.

Service Use

The primary purpose of the web service is to provide the charges data for a requested application. The

method that performs this function is getCurrentCharges and requires a chargesInput object as the input parameter. A getCurrentChargesResponse object is returned.

- getCurrentCharges(chargesInput)

DFA updates the charges table each night just before midnight. The agency application is responsible for obtaining and using the current charges information. Good practice is to obtain the charges data at least daily.

Charges Use in NIC MISSISSIPPI Common Checkout

The ChargeItem data will become the basis for a line item that is sent to the CCP in the Prepare Checkout call. The table below maps the line item fields referenced in the CCP interface to their related ChargeItem value. In the CCP Prepare Checkout service call, line items are sent in as an array of lineItems.

CCP Line Item element	**Field Description**	**Field used from Charges Item**
LineItem.SKU	Item identifier used in backend SAAS funds distribution.	ChargeItem.itemType
LineItem.Description	Description of the item being purchased.	ChargeItem.description
LineItem.Unit_Price	Cost of 1 of this item.	ChargeItem.amount
LineItem.Quantity	Quantity of the item being purchased.	Computed by the application.