Statewide Electronic Commerce Program
Status Report

State of North Carolina
Office of the State Controller

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March 7, 2007

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I. Executive Summary

Since the passage of Senate Bill 222 in 1999, the Office of the State Controller (OSC) has taken the lead in expanding the Statewide Electronic Commerce Program (SECP), specifically as it pertains to payments. The program has two primary components:

- Electronic Funds Transfer (EFT) Services
- Merchant Card Services (credit and debit cards).

Between 1999 and 2005, the foundation for the SECP was laid, including the creation of the Common Payment Services (CPS) gateway to service agencies on a statewide enterprise basis. The utilization of E-Commerce has allowed the State to continue toward its goal of shifting away from a paper-based environment, for both outbound and inbound payments. However, it has been recognized that the State has not achieved the level of success that the private industry has achieved in the area of E-Commerce in recent years.

In recognition of the State's need to catch up with the private industry trends, in the spring of 2005, OSC took steps to devote more resources to its E-Commerce program. These steps included the addition of a fulltime staff member to head the expansion effort. The E-Commerce staff members have been busy laying the groundwork for the following tasks:

- securing a new master services agreement for EFT services
- securing a new master services agreement for Merchant Card services
- developing E-Commerce related policies for agencies
- developing an educational resource for agencies
- devising a comprehensive strategic plan for the State

The program's first two tasks, the securing of two master services agreements were the first to be completed. Two separate procurement processes were conducted, resulting in two new contracts being awarded.

- EFT Services – Wachovia Bank – Awarded October 1, 2005
- Merchant Card Services – SunTrust Merchant Services, LLC – Awarded August 1, 2006

The enhanced terms of the new contracts were perceived to be the impetus for making it easier for agencies to take advantage of the various E-Commerce programs available to them. The primary enhancement is that the fees associated with the services are approximately half of what they were under the old arrangements.

Progress has also been made on other program initiatives. In 2005, there was a major rewrite of the E-Commerce policies, which was needed to address current industry requirements. The SECP website was given a complete makeover, with the goal of making the site more informative and more user-friendly. Also associated with the SECP was the major undertaking of educating agencies and assisting them in becoming compliant with the new Payment Card Industry (PCI) Data Security Standard, a mandated requirement for agencies accepting merchant cards.

This report is intended to lay the groundwork for helping move North Carolina state government closer to a paperless environment. Several issues require attention at this conjuncture, in order to provide a roadmap for the future of the SECP:

- **E-Commerce Policies and Legislation** – The development and modification of policies require constant attention due to the ever-changing environment and the need to balance controls and safeguards with the expectations of citizens and state agencies. Policy development can be more of a challenge than program operation itself. In some cases, statutory changes are needed for the State to keep up-to-date with industry changes, as well as to prompt agencies to be more aggressive in taking advantage of the E-Commerce opportunities, ensuring the utilization of best practices and statewide enterprise applications.

- **PCI Data Security Standards** – The diverse systems utilized by the various state agencies pose challenges in an era in which there is an onslaught of credit card information compromises and security breeches. The card industry's approach of establishing strict standards and of levying fines has resulted in increased agency liability, and therefore greater attention is needed to ensure that the State's infrastructure and business practices meet the mandated requirements.

- **Merchant Card Processing Fees** – While the cost of "electronic funds transfer" transactions has declined over the years and is considered affordable (pennies per transaction), the cost of processing "credit cards" on the other hand continues to escalate. Merchant cards processing cost is deemed reasonable for smaller dollar transactions, but not for large dollar transactions. The challenge involves how to fund the costs associated with credit cards, since the interchange fees are tied to the dollar volume and are determined by the card association networks.

- **Merchant Card Convenience Fees** – There continues to be varying opinions on whether the State should charge citizens a "convenience fee" for using credit cards, which is not the approach used in the private sector. In the private sector, the cost for processing a credit card is considered a "cost of doing business" and is built into the price of the product or service. There is an ever increasing <u>expectation</u> of the public for credit cards to be an accepted method of payment without a convenience fee being levied. A related issue is the non-uniformity of convenience fees being levied. Some agencies risk being cited for being in violation of card association rules, as some card brands only allow for the convenience fee to be a "flat fee," not one based on the amount of the transaction.

- **Utilization of Automated Clearing House (ACH) Transactions –** While the State has experienced much success in the expansion of the utilization of merchant cards for collections in recent years, the expansion of the utilization of ACH has become stagnant. ACH offers both "direct deposit" for disbursements and "bank drafts" for collections. The arena of ACH provides the greatest opportunity for agencies to participate, as it is the most economical and supports both outbound and inbound payments.

- **E-Commerce Expansion Needs** – It is widely recognized that conducting transactions electronically is economical and efficient, <u>once implemented</u>. The challenge pertains to resources required to: 1) identify the opportunities (i.e., ascertain where each agency is on the "E-Commerce curve and where they ultimately should be on the curve;" 2) motivate agencies to be more aggressive in pursing the new concepts; 3) identify and acquire the proper mix of vendors and services needed to provide the services required of the diverse agencies; 4) acquire the necessary IT infrastructure; and 5) obtain staffing to perform necessary implementation.

- **Funding for E-Commerce** – Most of the issues and challenges require additional funding. One of the challenges is being able to justify the initial expenditures, and then require accountability for the subsequent reduction in expenditures supposedly associated with the efficiencies obtained.

- **Expanded Enterprise Approach** – While the State has attempted to embark on utilizing the enterprise approach, most agencies that have an E-Commerce program have developed programs that are independent of each other, sometimes duplicating each other, and sometimes going in different directions. Except with the involvement of the former IRMS and the Office of Information Technology, the coordination of efforts has for the most part been lacking or non-existent. Because of the diverse needs of the agencies, the traditional enterprise approach involves more than just having a "single solution," but a "menu of centrally managed solutions." While the State Controller has the statutory authority to assist state agencies in their E-Commerce activities under the Cash Management legislation, there is a lack of authority to mandate agencies to implement or participate in E-Commerce programs.

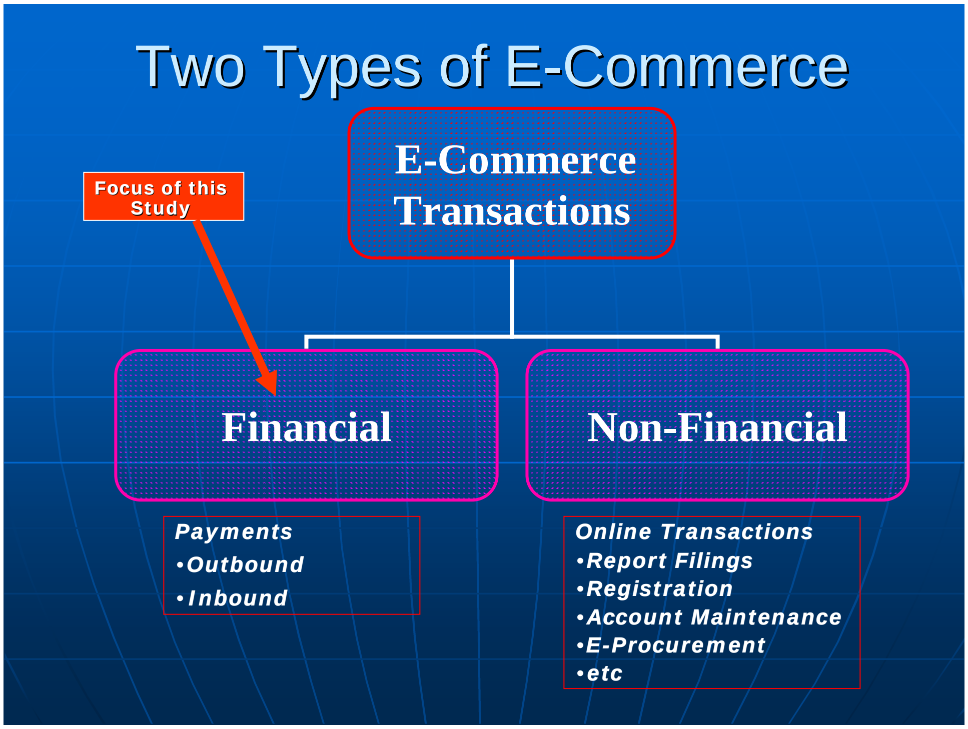
With over five years experience in E-Commerce by state agencies, it is time to evaluate the status of the program and to outline a more refined strategic plan for the future of E-Commerce for state government. As the business arm of state government and the agency with statutory authority for disbursements, the Office of the State Controller should be directed to conduct such a study that will incorporate all issues addressed herein and report back to the 2008 Session of the General Assembly with an E-Commerce Strategic Plan and proposed legislation for consideration by the General Assembly. The study should include enterprise agency representation and should be specific with recommendations for a course of action to maximize electronic commerce activity for North Carolina State Government.

II. Purpose and Scope

This report is intended to provide the North Carolina General Assembly, the Governor, and other State government leaders and decision makers with information regarding the status of Electronic Commerce in North Carolina State government, to include:

- Where we have come from
- Where we are today
- Where we should be heading
- What are the issues and challenges
- What we need to do to move forward

While E-Commerce is a term used broadly to describe all types of business activities that can be conducted electronically, primarily through the World Wide Web, this report will be limited to and focus on E-Commerce activities that pertain primarily to electronic activities involving *financial transactions* (payments). Electronic payments involve both *outbound* payments (disbursements) and *inbound* payments (collections). E-Commerce activities that are *non-financial* include online transactions such as report filing, registration, account maintenance, communication, downloading of materials, videoconferencing, e-procurement, etc. Both types of E-Commerce activities (financial and non-financial) are important, with the obvious benefits relating to better, more efficient, and more timely services being provided to businesses and citizens. E-Commerce activities assist in the elimination of paper and contribute to better cash management for the State.



III. Background

III (A). E-Government Report of 2001

A comprehensive report on the broader definition of E-Commerce, referred to as E-government, was prepared by the Office of Information Technology Services (ITS) entitled, "*E-Government – Using Technology to Transform North Carolina's Governmental Service Operations in the Digital Age*." The report, prepared in February 2001, can be viewed at:

http://www.its.state.nc.us/News/EGovernment/_Docs/EGovernmentReport2001.pdf

The 2001 report was an update of an earlier report prepared in 1999 by the E-Commerce Work Group (ECWG), appointed by Lt. Governor Wicker in early 1998 and led by Secretary of State Elaine Marshall. The ECWG report was entitled, "*A New Way of Doing Business*." These two reports laid the groundwork for identifying the State's status regarding E-government at the turn of the century, as well as identifying the opportunities and challenges perceived at the time. E-Commerce, which incorporates the financial transactions aspects, is a vital component of E-government. The 2001 ITS report can be summarized by the executive summary, which stated:

> *Approaching the end of the twentieth century, North Carolina focused its attention and technology on preparing and eliminating the Year 2000 (Y2K) problem, which it successfully accomplished. Starting from a middle-of-the-pack position on e-government, through executive leadership, legislative sponsorship, and hard work, the State leaped to the forefront with its statewide portal receiving Government Technology magazine's "Best of the Web" award, signifying excellence in Internet-based initiatives among state governments nationwide. North Carolina is prepared to address the challenges and accomplish the tasks necessary to remain a leader in e-government so it can provide better and more cost-effective government for its businesses and citizens.*

While not intended to be an update of the 2001 ITS Report, this report will consider some elements of the ITS report, particularly the ones pertaining to E-Commerce activities associated with financial transactions, and the ones pertaining to the groundwork activities associated with the success that the State has achieved in this arena. While the groundwork had been laid for a successful E-Commerce program, it is incumbent upon the State to periodically examine the degree of success that has actually been achieved and to determine what is needed to ensure that the State continues to move forward.

III (B). Efficiency Goals

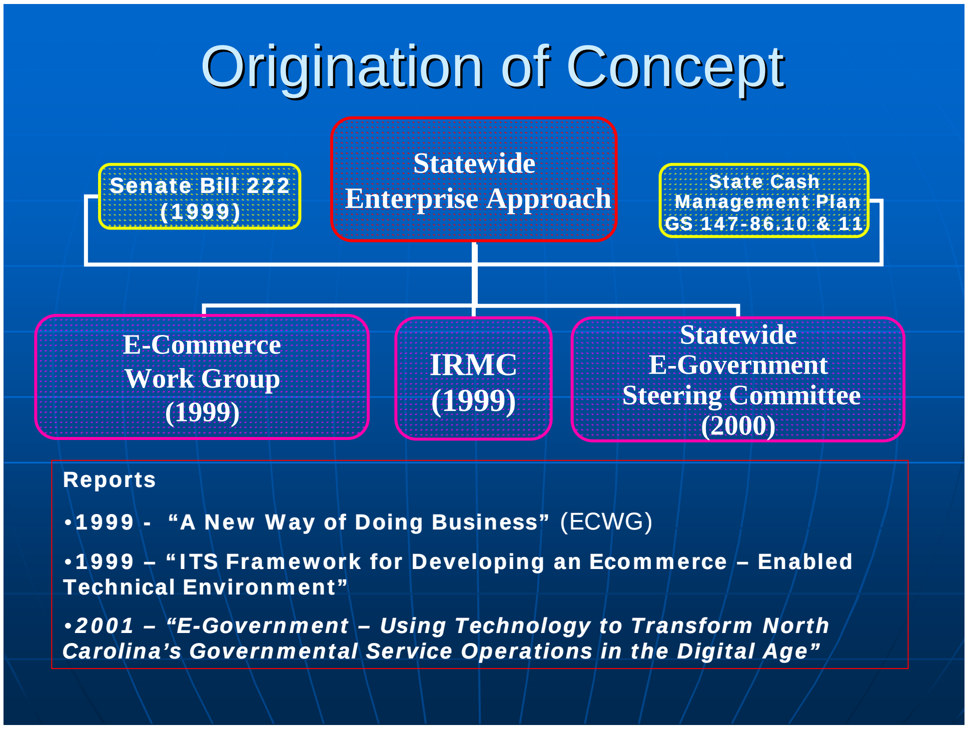
The 2001 ITS Report summarized the goals that were envisioned by developing a successful E-government program. The goals identified in the report are equally important and pertinent today. The report stated:

> *For citizens, e-government offers simple, fast, convenient, and personal methods to access information, receive services, order permits and licenses, pay fees and taxes, and file information. For businesses, e-government means relief from costly and manually intensive filing and reporting duties. For government, e-government provides opportunities to achieve cost reductions through streamlined and combined processes; assists in improving program performance and results in areas such as law enforcement, education, and health care; fosters economic development and the resulting prosperity of citizens; and strengthens democracy through easier public participation.*

III (C). Enterprise Approach

Perhaps the one most single concept that the State recognized and embarked upon beginning around the turn of the century was the *enterprise approach* to the E-government solutions and services. The enterprise approach was a concept that evolved from the E-Commerce Work Group (ECWG) formed in 1998 and implemented by the "Statewide E-Government Steering Committee," which was appointed by Governor Hunt and chaired by Secretary of Commerce Rick Carlisle in early 2000. The enterprise approach was further fostered by the Information Resource Management Commission (IRMC), chaired by State Auditor Ralph Campbell, as outlined in a report prepared in September 1999 entitled, "ITS Framework for Developing an E-Commerce–Enabled Technical Environment." The enterprise approach concept, as explained in the 2001 ITS Report is as follows:

> *The State is using an enterprise perspective for implementing e-government to build applications faster, more economically, and with better results. Where possible, individual agency and program needs are met by technology investments and resources that can be used by all. As a result, aggregation of demand lowers purchase prices and economies of scale reduce unit costs. In addition, specialized, scarce, and expensive resources that are not affordable by individual organizations or initiatives can be made available by combining funding sources and sharing resources.*
>
> *The aggregating of similar e-government transactions from all agencies through common technical resources spreads the fixed costs of this infrastructure over high volumes to reduce unit costs. In addition, reusable technical components are being used in all e-government applications to reduce redundancy and increase reliability of processing. Common business and technical models, best practices, and best procedures are being shared to the greatest extent possible to leverage past experiences and statewide knowledge.*



III (D). Senate Bill 222 of 1999 General Assembly Session

Senate Bill 222 of 1999 had several provisions that promoted the statewide enterprise approach (G.S. 143B-472.50 - 67). The statute stated in part that, “*The purpose of enterprise management is to create a plan and implement a State government-wide approach for managing distributed information technology assets… All state agencies covered by this Part shall use contracts for information technology required by the state agency that is provided by these contracts*.” Although later repealed, the statute was replaced with similar legislation, giving the State’s Chief Information Officer authority to provide services on a statewide enterprise basis.

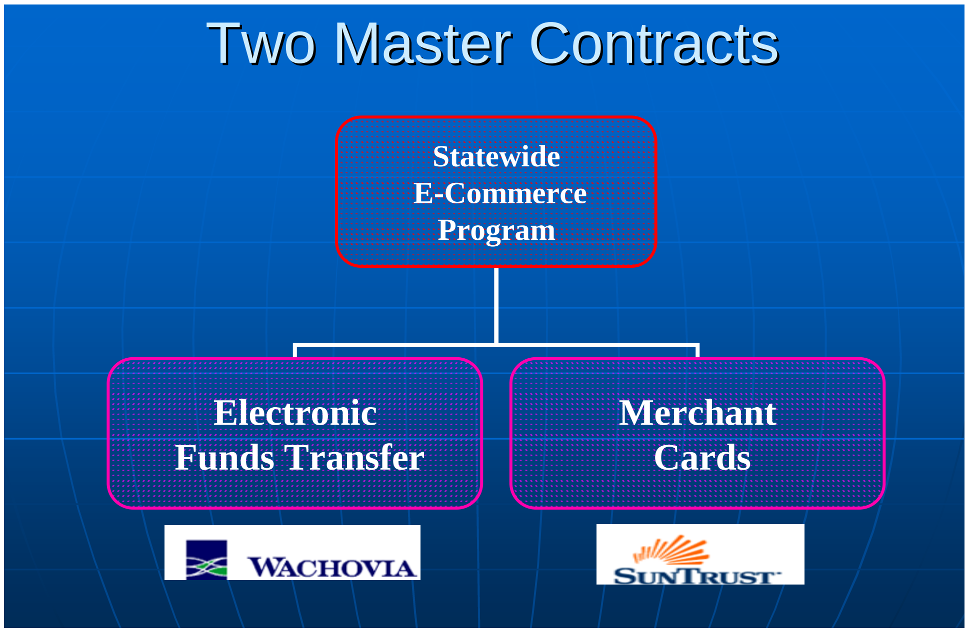
Additionally, Senate Bill 222 had several other provisions that provided the impetus for the expansion of E-Commerce, specifically amending the statute pertaining to the “State Cash Management Plan” (G.S. 147-86.10 -through 22). The provisions:

- Incorporated “electronic payments” specifically into the Plan, by adding, “*This Policy shall include the acceptance of electronic payments in accordance with G.S. 147-86.22 to the maximum extent possible consistent with sound business practices*.”
- Defined “Electronic Payment” to mean “*Payment by charge card, credit card, debit card, or by electronic funds transfer as defined in this subsection*.”
- Required the State Controller to establish policies pertaining to the utilization of electronic payments for the collection of accounts receivables.
- Allowed for processing fees associated with electronic payments to be paid out of the General and Highway Fund if the payment of the fee was economically beneficial to the State.

III (E). State Controller’s Statewide Electronic Commerce Programs Initiated

Based on directives and authorizations provided in SB 222 of the 1999 session, OSC took the first steps in the development of a statewide enterprise infrastructure to accommodate “electronic payments,” as defined in G.S. 147-86.00(2a). The term “electronic payment” was deemed to have two components: 1) Merchant Cards (debit and credit cards); and 2) Electronic funds transfer (EFT).

In addition to the IT infrastructure, each of the two programs (merchant cards and EFT) required the services of a third party provider. Some agencies already had individual programs that they had acquired directly from different service providers. As a result, there were a variety of vendors and there was no uniformity in the fee schedules. To fully take advantage of the enterprise approach, it was deemed appropriate for OSC to arrange for a “master services agreement” (MSA) with a service provider under which all state agencies could participate. OSC’s plan was to first secure a service provider for merchant card services, and then secure a service provider for EFT services.



As the result of a procurement process, the Master Services Agreement (MSA) for merchant card services was provided by OSC in 2000, with Wachovia Merchant Services being awarded the contract (later assumed by SunTrust Merchant Services as the result of the Wachovia/FUNB merger in 2004). The MSA for EFT services was provided by OSC in 2002, with First Union National Bank being awarded the contract (later assumed by Wachovia Bank as a result of the Wachovia/FUNB merger in 2004).

III (F). Common Payment Service Gateway Developed

In order to conduct electronic commerce through the Web, in addition to service providers (i.e., a merchant card processor and an ACH originating bank), an agency has infrastructure needs. One component of the infrastructure is in the form of in-house Web development and IT applications. The other component is a “gateway” service to process Web transactions with the service providers.

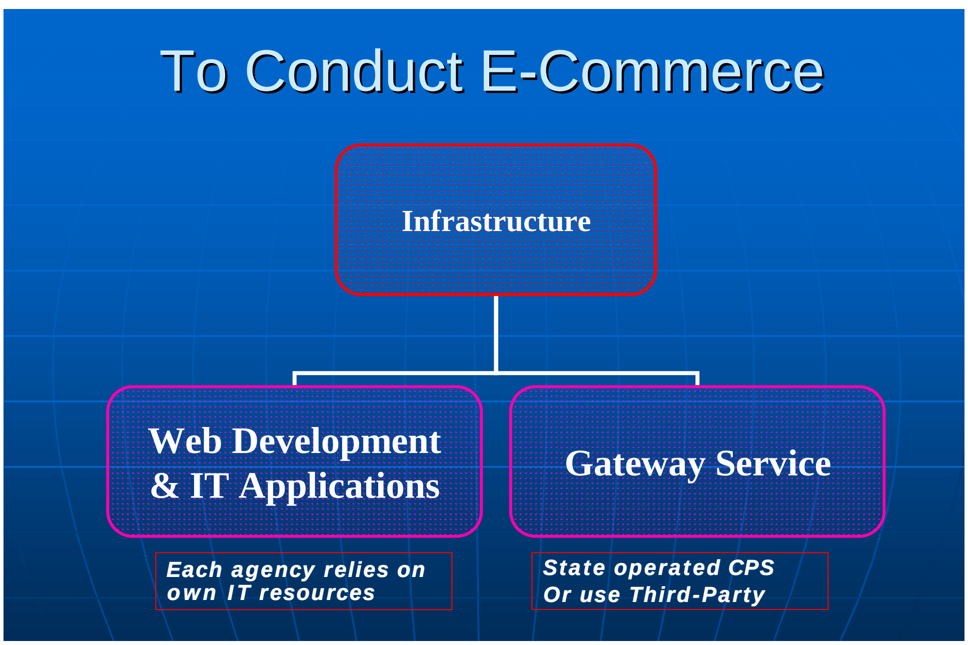
To accommodate the statewide enterprise approach the State was embarking upon, and to provide a “gateway” for agencies to use to interface merchant card transactions captured on their web sites with the third-party service provider, the State decided to develop a central gateway service. In 2000, in conjunction with the implementation of OSC’s Merchant Card MSA, ITS developed the Common Payment Service (CPS). The stated goal of CPS was “*to establish a shared service that enables state applications to interface with and access through the Internet or interactive voice response (IVS) unit, the payment processing services provided by the credit card vendor.*” With the assistance of an outside vendor, ITS acquired and installed an Application Program Interface (API) that would support both merchant card transactions and EFT transactions.

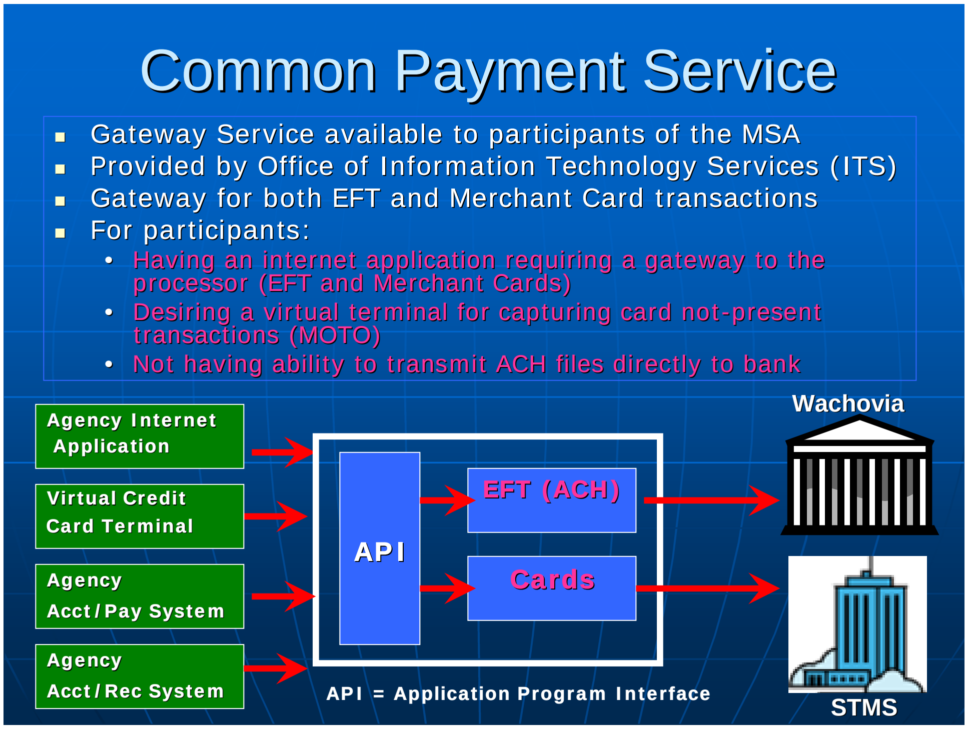
When created in 2000, it was envisioned that the CPS would be the primary component of the statewide enterprise solution for E-Commerce, providing the “engine.” This has been the case for most Internet applications that involve merchant card transactions for the general government agencies. However, after six years of operation, it has been determined that there are other gateway solutions that are more suitable for certain agencies and applications. While CPS does not provide the range of services that are needed by all agencies, it does provide the basic needs of the primary general government agencies for which it was originally developed (Division of Motor Vehicles and Department of Revenue).

Today, CPS processes 42% of the merchant card transactions (22% of the dollar volume), which represents most of the transactions that require a gateway service for their Internet operations for the general government agencies. Fourteen of the sixteen universities do not use CPS as their gateway, but instead use a third-party gateway service that is compatible with the university Banner System. Agencies using POS terminals, instead of Internet applications, do not require a gateway service. During FY 2005-06, CPS processed 1.5 million merchant card transactions, totaling $95.5 million. By comparison the total of merchant card transactions not processed through CPS was 2.1 million, totaling $339.5 million. The average size CPS transaction was $64, while the average size non-CPS transaction was $162.

Additionally, CPS processes 20% of the State's EFT transactions, nearly all transactions that require a gateway service. The other 80% of the EFT transactions do not require a gateway interface, as files are transmitted directly from the agency to the service provider (e.g., payroll). During FY 2005-06, CPS processed 1.3 million EFT transactions, totaling $4.2 billion.

As the State moves ahead with E-Commerce, CPS will continue to play a role, but it should be recognized that it is only a small segment of the program, and not the primary "engine" as originally envisioned. Solutions being looked at now involve a variety of E-Commerce third parties, as CPS does not offer the "capture" solutions (web-based applications) that an agency needs to facilitate the "bank draft" payment option.





III (G). Local Units of Governments Accommodated

Senate Bill 222 of 1999 not only addressed the electronic payment needs of the State, it also addressed local units of governments by including similar provisions in Chapter 159 of the General Statutes. The statute allowed local units of government to participate in contracts that the State secured under the enterprise approach.

Regarding local units of governments, the enterprise approach for "merchant card services" appeared more attractive to the units than "EFT services." Currently, 30 local units of governments participate in the merchant card services master services agreement, while only one local unit participates in the EFT master services agreement. The perceived reasons for the low participation rates include:

- Established local bank arrangements (Units are provided "bundled services" from their local bank)
- Less need for the Common Payment Service offered by the State
- Non-existent marketing effort to include the local units

While there could be greater utilization by local units of governments in the statewide program, the first emphasis should be on expanding the program for state agencies, as that is where the greater need exists.

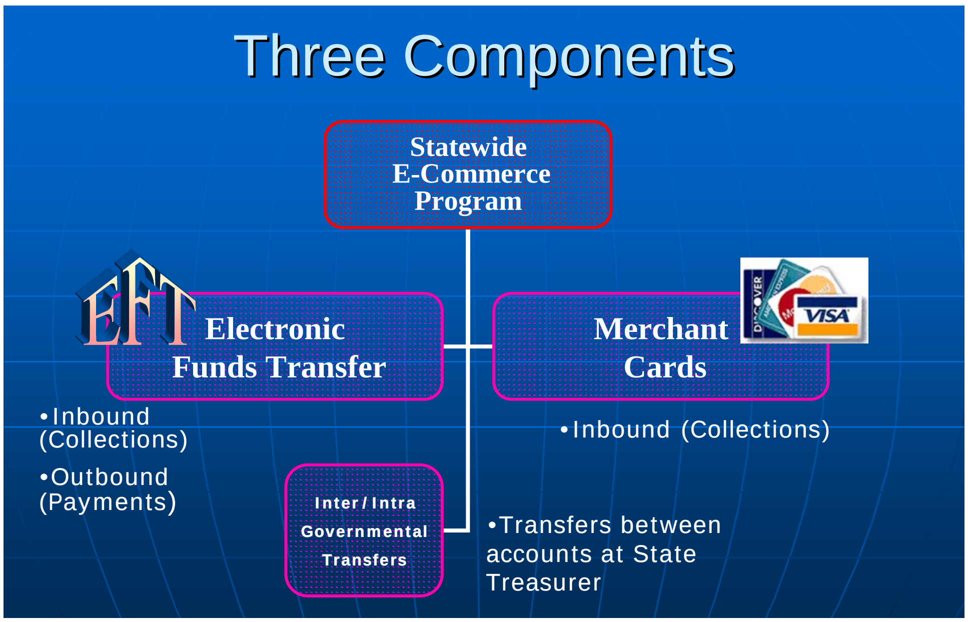
III (H). Inter/Intra Governmental Transactions

In 2004, the OSC expanded the definition of the Statewide Electronic Commerce Program to include a third component, known as Inter/Intra Governmental Transactions. This component involves transactions between agencies that bank with the State Treasurer. Such transaction merely involves the transfer of funds between accounts maintained with the State Treasurer, and therefore does not require a third-party service provider. OSC developed procedures that allowed agencies to use the North Carolina Accounting System (NCAS) to facilitate the transfers. During FY 2005-06, 16,917 NCAS disbursements totaling $522 million were made via the Inter/Intra Governmental Transfer method, representing 1.7% of the total number of NCAS transactions. A description of the program can be viewed at the following OSC site:

http://www.ncosc.net/sigdocs/sig_docs/Inter_Intra_Governmental_Transactions_Index_Page.html

In 2005 and 2006, the program was expanded again to allow certain inter/intra governmental transactions that could not be accommodated by the NC Accounting System (NCAS) to be facilitated through the State Treasurer's Core Banking System (CB$), using the Funds Transfer feature. This component also contributes to the elimination of paper checks. The primary users of this feature are the various payroll centers that remit retirement withholding payments to the Retirement Systems Division, and income tax withholding payments to the Department of Revenue (DOR). Agencies remitting sales taxes to the DOR can also use the feature. The CB$ Funds Transfer feature provides for remittance data to be submitted along with the payment to the receiving agency, similar to an ACH transaction containing an addendum record (CCD+). A description of the Core Banking System's funds transfer feature can be viewed at the following DST site:

http://www.nctreasurer.com/dsthome/FinOperations/CoreBanking/



III (I). EFT Activity Prior to the Statewide Electronic Commerce Program

While OSC took on the role of developing a Statewide Electronic Commerce Program as a result of Senate Bill 222 in 1999, North Carolina has been a leader in providing EFT as far back as the late 1970s. In 1977, State Treasurer Harlan Boyles implemented the State's first EFT program, offering direct deposit of Retirement benefits to retirees paid from the Retirement System. Two years later, central payroll followed suit by offering direct deposit to active state employees. Over the next 20 years, the Department of State Treasurer spearheaded the expansion of direct deposit for the various payroll centers that disbursed funds comprised of State funds. This included payroll for the universities, the community colleges, and the local school systems. Treasurer Boyles was recognized nationally in 1986 for the State's achievements by being awarded the National Automated Clearing House Association's "Payment Systems Excellence Award." By the year 2000, the participation rate for the Retirement System and the payroll centers had exceeded 90%.

In 1992, the Retirement System was the first agency to implement an EFT program for collections (inbound payments). The program, known as the "State Treasurer's Electronic Payments System"

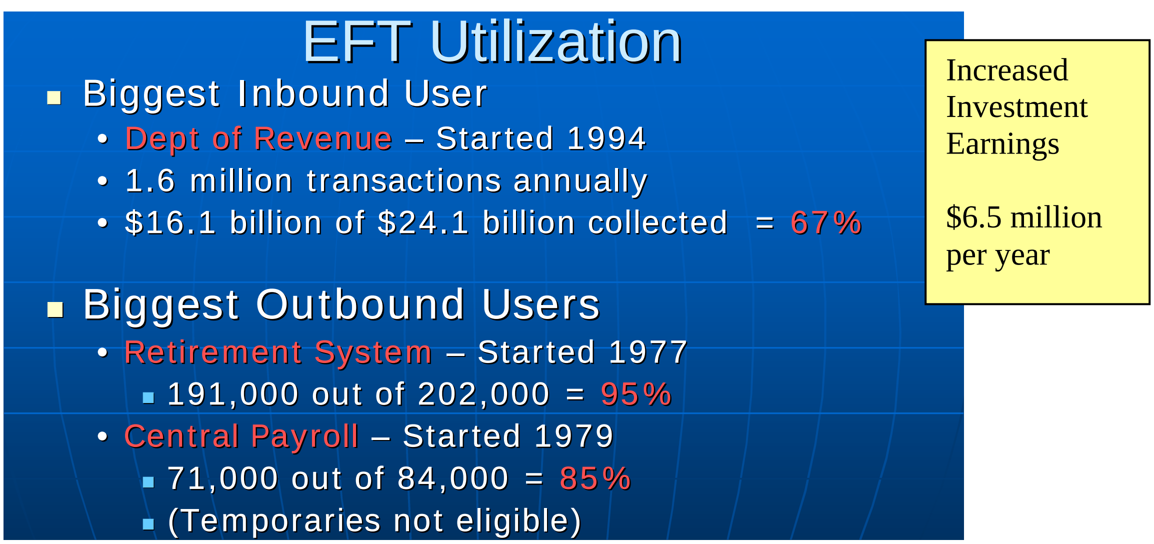
(STEPS) provided a mechanism for local units of governments, community colleges, and local school systems to remit their monthly retirement contributions (both employer and employee portions) electronically, using the ACH debit method. While the State Treasurer had implemented a system known as “Governmental Moneys Transfer System” (GMTS) in 1984 that provided for outbound payments to local units of government to be made electronically, STEPS was the first step in making inter-governmental payments a “two-way street.”

In 1994, DOR implemented its version of an EFT program for the collection of taxes (inbound payments). This program offered the taxpayers two methods to initiate their EFT payments: 1) the ACH debit option via a third-party data collection center; and 2) the ACH credit option via its own bank. Over the years, DOR has periodically lowered the threshold required for mandatory participation, as well as offered EFT on a voluntary basis. Over 8,000 taxpayers are mandated to remit electronically, while nearly 100,000 taxpayers elect to remit voluntarily. During FY 2005-06, 1.6 million transactions, totaling $16.1 billion, were received electronically by DOR (67% of taxes received). While DOR has statutory authority to mandate certain taxpayers to remit electronically, other agencies do not.

DOR is an example of the benefits obtainable from a successful EFT program. In addition to reduced transaction costs, the big advantage is the speedier collection and quicker funds availability. This results in money being available for expenditure or for investment sooner than if collected by check. Treasury consultants indicate that collecting funds by EFT eliminates two types of float – mail float and check float (typically 3 1/2 days). During FY 2005-06, DOR’s EFT program resulted in $6.5 million additional investment earnings for the State.

During the 1990s, other agencies developed their own individual EFT programs, including the Employment Security Commission (ESC) for disbursing unemployment benefits, the Wildlife Resources Commission for the collection of payments from agents selling hunting and fishing licenses, and the Department of Health and Human Services (DHHS) for both the collection and payment of child support payments. In 1999, DHHS also began paying food stamp benefits using the “Electronic Funds Benefit (EBT) card.”

The implementation of the more inclusive policy for E-Commerce participation in 2005 and the attractive fee schedule obtained by OSC as a result of the competitive bidding process provided an environment that made it more conducive for many of the various agencies operating their separate programs to be included under OSC’s Statewide Electronic Commerce Program.



III (J). Merchant Card Activity Prior to the Statewide Electronic Commerce Program

While there was not a master services agreement for agencies to take advantage of until the year 2000, several agencies had developed their own merchant card program, but utilization was limited. The first agency offering a merchant card program was the Wildlife Resources Commission, which has a source of funds (receipts) to pay for the bank's processing fees. Many of the universities developed merchant card programs, using institutional trust funds to pay the bank fees.

The passage of Senate Bill 222 in 1999 provided the impetus for the expansion of merchant card utilization from two perspectives:

- Provided for the development of a statewide enterprise approach
- Allowed for the payment of fees to be made from the General and Highway funds

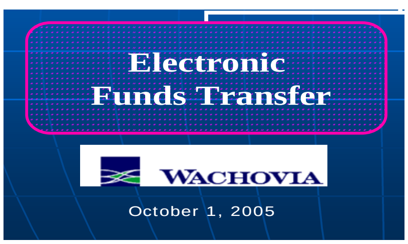
Consequently, the implementation of the statewide merchant card program in 2000 resulted in:

- Agencies that had their own separate programs now being included under the SECP
- Agencies not having a program at all beginning to participate in the SECP

IV. Recent Activities with E-Commerce

IV (A). New Master Service Agreement for EFT Services

In 2005, as part of OSC's renewed efforts to put a greater emphasis on the Statewide E-Commerce Program, OSC engaged in the procurement process necessary to re-bid the EFT services. Not only was the re-bidding process due, but it was envisioned that much better pricing could be obtained due to the volume levels that the state agencies were generating. The procurement process resulted in the awarding of a new contract with Wachovia Bank October 1, 2005.



<u>EFT / ACH Transaction</u>	
Old Fee	$ .03
New Fee	<$ .01

The enhanced terms of the new contract were deemed to be the impetus for making it easier for agencies to take advantage of the EFT services available to them. The primary enhancement was that the services would be less than half of what they were under the old arrangements. Although the same vendor was selected, the competitive bidding process resulted in the 5-year total costs under the new contract being approximately $600,000, compared to the former costs of approximately $1.5 million. The bank fee for processing an electronic disbursement is now less than a penny.

An additional benefit of the new contract was the result of a policy change initiated by OSC in 2005. Although the EFT contract had been operational for five years, the participation rate of agencies using the master services arrangement was extremely low. Only 20% of the State's EFT volume was being provided for under the master agreement. The other 80% was being provided to agencies under separate arrangements, not allowing for benefits available under an enterprise approach to be obtained.

There were two reasons for the low participation rate:

- Perceived requirement that the EFT services under the master agreement had to be obtained in conjunction with the Common Payment Service (CPS) gateway provided by ITS.
- Requirement that the fees for services obtained under the master agreement had to be paid for by the agency. Since many of the payroll centers (State, universities, community colleges,

and local school systems) had arrangements with various banks for the State Treasurer to absorb the costs associated with their E-Commerce activities, the agencies had no incentive to participate in the master agreement.

The OSC sought and obtained agreement from the State Treasurer to issue a policy that removed these two obstacles. Effective October 1, 2005, agencies were no longer required to utilize CPS if using the MSA. Additionally, the services under the master agreement were to be paid for under the same arrangements that they were being paid prior to the master agreement. Basically, all EFT fees associated with payroll direct deposit transactions and NCAS related transactions are now paid for the State Treasurer from the Short-term Investment Fund, pursuant to G.S. 147-69.3(f) , while each agency is responsible for fees for their subscribed services otherwise. The policy, entitled "Master Service Agreements for Electronic Payment," can be viewed at the following site:

http://www.ncosc.net/SECP/SECP_Policies.html.

IV (B). Separate Agreements for EFT Services

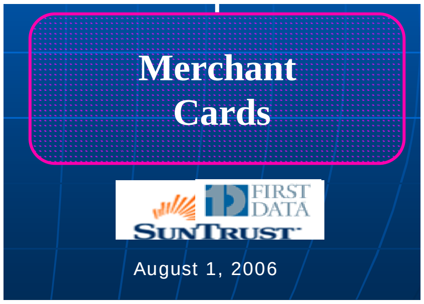
The new 2005 policy issued by OSC resulted in nearly all agencies utilizing EFT services being brought under OSC's master services agreement, greatly furthering the success of the enterprise approach. Previously, only 20% of the volume was being conducted under the old master services agreement, with 80% being under separate agreements.

As the result of business cases presented, exceptions were granted for the Department of State Treasurer - Retirement Systems Division (RSD) and the Employment Security Commission (ESC) to continue under separate agreements with their respective banks (First Citizens Bank and Bank of America). Justification for the RSD's exemption was that it was in the process of implementing its ORBIT system, and a change would pose undue risks. Justification for the ESC exemption related to certain US Department of Labor regulations that require the ESC trust funds to be kept in a dedicated depository bank account, along with all other receipts that are collected by check. The depository bank designated by the State Treasurer for ESC trust funds is Bank of America.

IV (C). New Master Services Agreement for Merchant Card Services

At the end of 2005, also as part of OSC's renewed efforts to put a greater emphasis on the Statewide Electronic Commerce Program, OSC engaged in the procurement process necessary to re-bid the Merchant Card services. Like the EFT services contract, it was envisioned that much better pricing could be obtained due to the volume levels that the state agencies were generating. The procurement process for merchant cards was more extensive than the one for EFT, due primarily to the implications relating to card associations rules, and the new PCI Data Security Standard (PCI DSS). After extended negotiations, the procurement process was concluded with the awarding of the contract to SunTrust Merchant Services, LLC (STMS), which is a partially-owned subsidiary of First Data Merchant Services.

Like the EFT contract, the primary enhancement of the new merchant card contract was that the services would be less than half of what they were under the old arrangements. Although the same vendor was selected, the competitive bidding process resulted in the 5-year total costs under the new contract being approximately $1.4 million, compared to the former costs of approximately $3.34 million. The vendor-levied fee for processing a merchant card transaction is now $.04, a rate that is believed to be one of the lowest in the country.



Card Transaction	
Old Fee	$ .108
New Fee	$ .04

The "per transaction" fee is only one component of the total cost of processing a merchant card transaction. The pass-through fees, generally referred to as interchange fees charged by the card associations, continue to be passed on at actual cost. Considering both vendor-levied and pass-through fees, the total fee for a typical transaction is approximately 3.2% less than under the old contract. A more detailed discussion of merchant card fees is found later this report.

	Pass Thru Costs	Vendor-Levied Costs	Total Costs
Year 1	$ 7,375,489	$ 186,860	$ 7,562,349
Year 2	$ 9,221,897	$ 229,530	$ 9,451,427
Year 3	$ 11,524,835	$ 281,200	$11,806,035
Year 4	$ 13,827,773	$ 330,065	$14,157,838
Year 5	$ 15,897,374	$ 374,210	$16,271,584
Total	$ 57,847,368	$ 1,401,865	$ 59,249,233

Other enhancements provided by the new agreement included clarification regarding liabilities associated with the card industry rules, including the PCI DSS. While participants in the contract are not exempt from the liabilities, which could result in substantial fines for security breaches, the contract allows for a dispute resolution process, as well as specifying that all liabilities are borne by the participating entity, not the State Controller or State Treasurer. A more detailed discussion of the PCI DSS is found later in this report.

IV (D). Master Service Agreements with Proprietary Card Companies

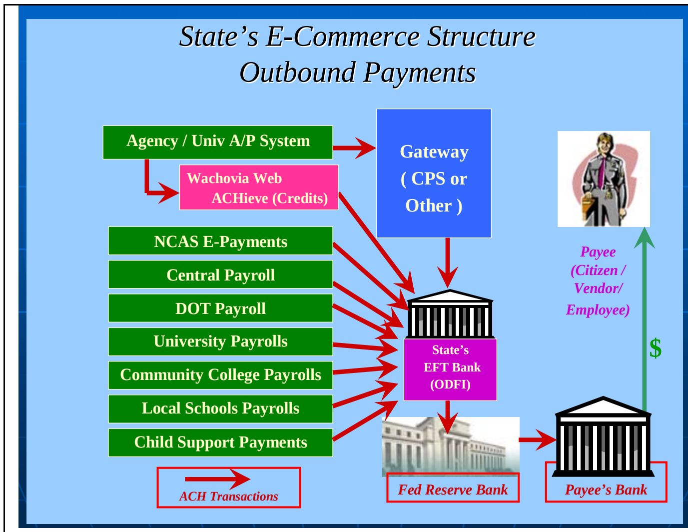
The master services agreement with STMS allows for participating agencies to accept credit and debit cards issued by both Visa and MasterCard, without the participant having to execute any additional agreements. However, the master agreement does not provide for the acceptance of proprietary cards, such as American Express or Discover, unless the State or the agencies were to enter into agreements directly with the proprietary card companies.

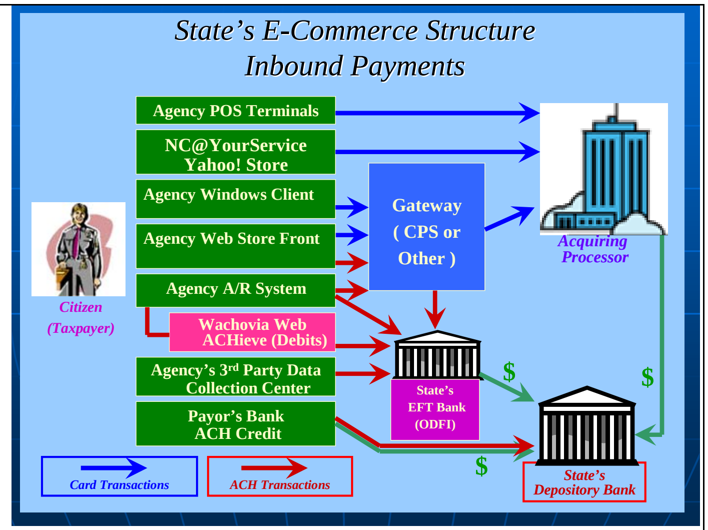
In December 2006, in response to the interest of several agencies, the State Controller issued an E-Commerce policy that addressed how agencies could elect, on an optional basis, to accept proprietary cards. The policy allowed the State Controller to negotiate master agreements with the various proprietary card companies in order to obtain more favorable discount rates. In January 2007, after successfully negotiating a master agreement with American Express Travel Related Services Company, Inc., the American Express card program was made available to all participants. Negotiations are underway with other proprietary card companies. Like in the private arena where not all merchants accept proprietary cards, not all agencies will elect to accept the proprietary cards. The main reason is that there is a one-day delay in receiving funds for proprietary card transactions, as compared to a Visa or MasterCard transaction.

IV (E). Current E-Commerce Structure

As a result of the two master contact arrangements, one for EFT Services and one for Merchant Card Services, and as a result of the policy changes implemented by the State Controller, the structure of the Statewide Electronic Commerce Program had taken on a new look by the end of 2006, with a larger number of participants being included in each program than previously.

- Outbound payments – Supported by EFT (Wachovia Bank)
- Inbound payments – Supported by both EFT (Wachovia Bank) and Merchant Cards (SunTrust Merchant Services)





IV (F). E-Commerce Policies Updated

In accordance with the directive of Senate Bill 222, OSC developed several E-Commerce policies pertaining to E-Commerce in 2000. The initial policies dealt with the processing of merchant cards. In 2002, OSC developed additional E-Commerce policies dealing with EFT processing. The policies were developed with concurrence of the State Treasurer, and reported to the Joint Legislative Commission on Governmental Operations.

In October 2005, as part of OSC's renewed emphasis on the Statewide Electronic Commerce Program, a major revision of the policies was performed. The revisions basically incorporated more concise explanations of the existing policies, as well as incorporated industry changes that had occurred since the policies were originally developed. When the policies were being revised, it was determined that the State had not been as successful in the utilization of electronic payments as hoped for. It was therefore determined appropriate to:

- Give agencies more direction in expanding their utilization of electronic payments
- Provide the agencies with justification and a basis for mandating the use of electronic payments for certain types of payments

The policy entitled, "Maximization of Electronic Payments" was therefore revised to accomplish these objectives. The premise of the policy was based primarily on several statutes, to include:

- <u>G.S. 66-58.12</u> states in part, "*Public agencies are encouraged to maximize citizen and business access to their services through the use of electronic and digital transactions. A* *public agency may determine, through program and transaction analysis, which of its services may be made available to the public through electronic means, including the Internet. The agency shall identify any inhibitors to electronic transactions between the agency and the public, including legal, policy, financial, or privacy concerns and specific inhibitors unique to the agency or type of transaction. An agency shall not provide a transaction through the Internet that is impractical, unreasonable, or not permitted by laws pertaining to privacy or security."*

- G.S. 147-86.11(h) states, "*New Technologies – The statewide cash management plan shall consider new technologies and procedures whenever the technologies and procedures are economically beneficial to the State as a whole. Where the new technologies and procedures may be implemented without additional legislation, the technologies and procedures shall be implemented in the plan*."
- G.S. 143B-426.39 (5) states, "*The State Controller shall prescribe the manner in which disbursements of the State agencies shall be made, in accordance with G.S. 143-3*."
- G.S. 143-3.2 (a) states in part, "*All warrants issued for non-State entities shall be delivered by the appropriate agency to the entity's legally designated recipient by United States mail or its equivalent, including electronic funds transfer*."

The revised E-Commerce Policies can be viewed at the following OSC site:

http://www.ncosc.net/SECP/SECP_Policies.html.

Policies	Effective Date	Revision Date
Maximization of Electronic Payment Methods	August 16, 2000	October 01, 2005
Master Services Agreements for Electronic Payments	October 01, 2005	
Funding for Electronic Payment Services	August 16, 2000	October 01, 2005
Charging Transaction Fees	August 16, 2000	October 01, 2005
Security and Privacy of Data	August 16, 2000	October 01, 2005
Electronic Payment Confirmation	August 16, 2000	October 01, 2005
Customer Transaction Disputes	August 16, 2000	October 01, 2005
Authorization for Merchant Card Transactions	August 16, 2000	October 01, 2005
Authorization for ACH Transactions	April 12, 2002	October 01, 2005
Types of Merchant Cards Accepted	December 15, 2006	
Merchant Cards Security Incident Plan	February 01, 2007	

IV (G). Standard Method of Payment by EFT

Since the beginning of the State's utilization of EFT beginning in 1977, there had been questions regarding the State's authority to mandate payment by EFT. There was no blanket policy regarding the mandate of direct deposit for payroll, although there were such policies being followed by select agencies and universities. Most of the policies provided for a "hardship exemption." For example, in 1994, the Retirement System began requiring all retirement benefits to be made by direct deposit, but only for new retirees. UNC Hospitals issued a policy that required all it employees (with no exemption) to be paid by direct deposit.

In October 2005, it was determined that the four statutes referenced above provided sufficient authority for the State Controller to issue a statewide policy to make the "standard method of payment" to be by EFT. This statewide policy pertained to those agencies subject to the State's Cash Management Law (G.S. 147-86.10).

Additionally, the North Carolina Department of Labor (NCDOL), which is responsible for the NC Wage and Hour Act (WHA), has taken the position that direct deposit is merely another form of payment under the WHA. The payment of wages by direct deposit is addressed in NCDOL's Administrative Rules, which states in part:

> ***0309 Form of Payment of Wages:*** *G.S. 95-25.6 and G.S. 95-25.7 do not require a specific form of payment. Therefore, the employer may select any legal form of payment, so long as payment is made in full on the designated payday, subject to authorized deductions and legal withholdings. Acceptable forms of payment include cash, money order, negotiable checks, and direct deposit into an institution whose deposits are insured by the United States government or an institution selected by the employee*.

The NCDOL's "Direct Deposit Enforcement Position" can be viewed at the following NCDOL site:

http://www.nclabor.com/wh/dirdep.htm

Three elements of the policy entitled, "Maximization of Electronic Payments," as revised in October 2005, provided for the standard method of payment by agencies to be by EFT (ACH direct deposit). The policy states in part:

- *Each NCAS agency shall develop procedures to require the standard method of payment to all vendors and other payors to be by ACH direct deposit, utilizing either the E-Payment feature of NCAS or a stand-alone system approved by the State Controller. Exemptions for individual payees may be considered if a hardship can be provided, or if the payments are non-recurring.*
- *Each non-NCAS agency and university shall develop payment methods that allow for the utilization of ACH direct deposit.*
- *Each payroll center shall utilize ACH direct deposit for all payroll payments to all full-time employees. Exemptions for individual employees may be considered if a hardship case can be provided. Each payroll center is encouraged to offer ACH direct deposit to all part-time and temporary employees.*

One of the challenges for the agencies in implementing the policy regarding the "standard method of payment" pertains to the definition of "hardship exemption." Determining what constitutes a hardship case is currently left up to the individual agency to ascertain. Once BEACON is implemented, the determination will be made by OSC. Examples of hardship could include:

- Not having a bank account as the result of being denied an "economy banking account," due to the individual's low credit rating.
- Having a residence in a foreign country, for which direct deposit is not available.
- Being paid at the "minimum wage" and having a bank account where the bank charges a maintenance fee, which effectively results in the net pay (prior to deductions) being less than the minimum wage, which could be interpreted as being in violation of the wage and hour laws.

In the cases where a direct deposit exemption is made, the agency is only obliged to remit the check to the payee by US mail or its equivalent, as provided for in G.S. 143-3.2(a).

Although direct deposit has been offered by the State's Central Payroll Center since 1979, the participation rate for direct deposit had peaked at 80%. The prime reason for not achieving a higher participation rate was internal procedures that prevented employees that were paid in cycles other than the last day of the month from being able to participate in direct deposit. Additionally, temporary employees were not eligible. In June 2006, OSC made both policy and procedural changes that allow these employees, primarily part-time and temporary employees, to participate in direct deposit. With this procedural change, the participation rate has risen to 85%. The exclusion of temporaries prevents the rate from being higher.

Once BEACON (Building Enterprise Access for NC's Core Operation Needs) is implemented, the ability to require the standard method of payment to be by direct deposit will be easier to enforce, and to be accepted by the employees. Also, with BEACON the State Controller is exploring the offering of Payroll Debit cards. Such cards are well suited for temporaries, as well as for the category of employees that are considered "unbanked," and therefore not eligible for direct deposit.

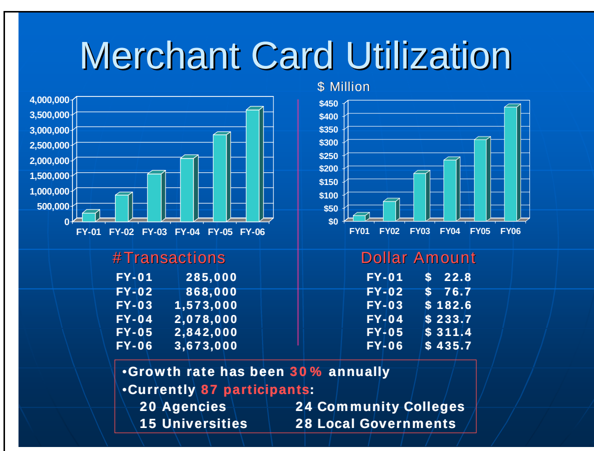
IV (H). Utilization of EFT for Disbursements

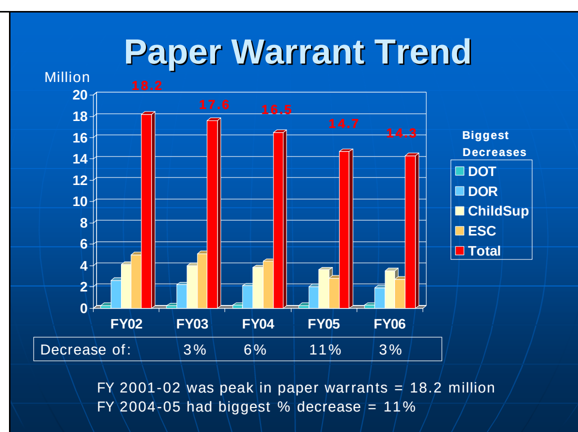
Since the early 70's bankers have been predicting a "Checkless Society." In 2004, the Federal Reserve Bank reported that for the first time, electronic transactions now outnumber paper transactions. Over the past couple years the Federal Reserve Bank has even been closing down check processing centers. The State has generally lagged behind the national reduction trend.

The number of paper checks issued by the State began to decline beginning in FY 2001-02. During that peak year, there were 18.2 million paper checks issued, with the number declining to 14.6 million during FY 2005-06. If stacked on top of each other, the stack would be 7,000 feet, which equal the height of 5 ½ Empire State Buildings.

There are different costs associated with the issuance of paper checks. The cost depends upon the size of the company (agency), the volume of checks issued, and the overhead cost allotted to the issuance. The most widely cost used by Treasury consultants is the one used by the Gartner Group. The Gartner Group indicates the average cost for a typical company is $.67. The Employment Security Commission reports that the cost of an unemployment check is $1.80. Although there are overhead costs associated with an EFT program, the "per transaction" cost charged by the ACH vendor is less than a penny.

For every 1% reduction in paper checks issued there would be a savings of approximately $100,000 to the State. While the State's various payroll centers have achieved much success in the area of EFT (participation rate around 94%), there has been little success in the utilization of EFT for vendor payments. During FY 2005-06, 22% of the disbursements made from NCAS were via EFT. Unlike the federal government, there is no mandate for vendors to be paid electronically. Additionally, EFT for vendor payments has not been aggressively promoted.





IV (I). Utilization of Debit Cards for Disbursements

The Department of Health and Human Services (DHHS) disburses food stamp benefits using the Electronic Benefits Transfer (EBT) card, a program that was implemented statewide in June 1999. The food stamp program involves the distribution of federal benefits under the requirements of the US Department of Agriculture (USDA) Food Nutrition Service. An EBT card is similar to a bank-issued debit card. The primary difference is that it is considered to be issued by a government, and is subject to the Quest Operating Rules, which are administered by the National Automated Clearing House Association (NACHA). EBT food stamp cards can only be used at Point-of-Sale (POS) terminals belonging to approved retailers, and only for the purpose of purchasing food. DHHS currently contracts with eFunds Corporation, one of the EBT vendors that specialize in providing EBT services to the 50 states. The fee paid to the vendor is $1.64 per case per month. Funding of the card is made only after a purchase is transacted with a retailer, with the funding being made directly to the vendor by the USDA. Funds are never on deposit with the State Treasurer. DHHS selected the vendor through a competitive bidding process. Information can be viewed at:

http://www.ncdhhs.gov/dss/foodstamp/ebt.htm

In the spring of 2007, DHHS plans on piloting with SMI, its Child Support collections vendor, a program to disburse child support payments to custodial parents via a debit card, in addition to its method of distributing the payments via direct deposit (ACH). The program, which will utilize a debit card issued by JPMorgan Chase, is currently in the development stage.

The Employment Security Commission (ESC) administers the disbursement of unemployment benefits, in accordance with requirements of the US Department of Labor. Beginning in January 2007, the policy of ESC is now to issue employment benefits electronically, either by direct deposit or by stored-value cards (SVC). Stored-value means the card is supported by a prepaid funded account, instead of by a checking account. In 2006, ESC contracted with Affiliated Computer Services, Inc. (ACS), a vendor that specializes in providing stored-value card programs to various state government programs. ESC selected the vendor through a competitive bidding process.

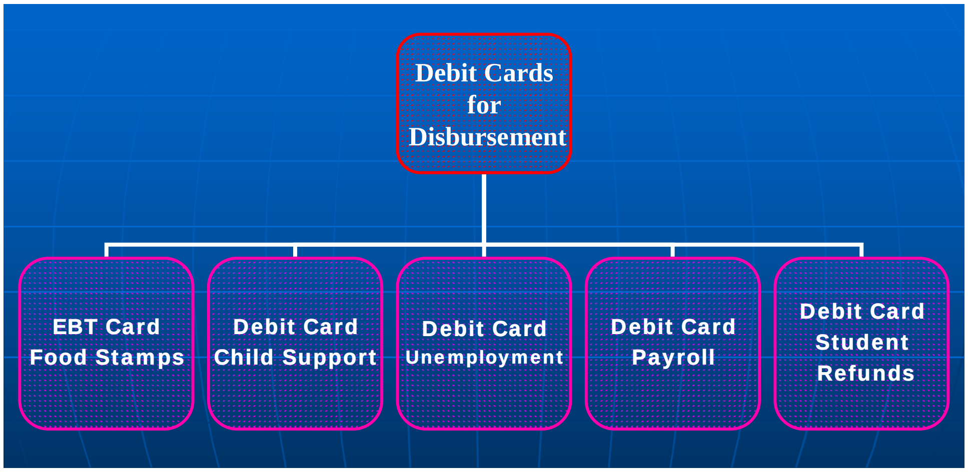
The debit card option is offered to those individuals not desiring to receive their funds by direct deposit, designed primarily for the "unbanked." When funds are disbursed by ESC, the funds are remitted electronically (via ACH credit file) from ESC's account with the State Treasurer to separate accounts administered by ACS at Comerica Bank. The cost per transaction in the ACH file is $.13, which is incurred by the State. While on deposit with the State Treasurer, interest earnings are subject to being remitted to the US Treasury, in accordance with the Federal Cash Management Improvement Act of 1990.

ESC clients can withdraw funds from their individual accounts administered by ACS by using a MasterCard branded stored-value debit card issued by Comerica Bank. The card is referred to as a "North Carolina EPPICard," or a "North Carolina Debit MasterCard Card." Fees for using the card are paid by the client, not by ESC. Cardholders are assessed the following fees: $1.50 for successful ATM cash withdrawals after two free withdrawals per month; $5.00 for each replacement card issued; surcharges occur at most ATM's, except at Wachovia ATM locations (which are free); no fees for purchases made at retailer POS terminals. Information can be viewed at:

https://www.eppicard.com/eppicard/nccard/index.jsp

Several universities also use a debit card to disburse student refunds. Similar to the debit card program offered by the ESC, funds are remitted to a vendor that specializes in providing debit card programs to universities. Higher One, which uses a MasterCard debit card issued by Horizon Capital Bank, is the primary vendor used by the universities. Information can be viewed at:

http://www.higherone.com/



V. E-Commerce Issues

V (A). Payment Card Industry Data Security Standard

Perhaps the one single issue that has demanded more resources and required close attention related to the SECP has been the Payment Card Industry Data Security Standard, which emerged as a forefront issue during 2005. With the rise in instances of cardholder information compromises, the card associations issued Rules that service providers and merchants must adhere to protect cardholder data. The primary focus of the PCI DSS is to help merchants improve the safekeeping of cardholder information by tightening their overall security standards, which in turn reduces their chances of experiencing security breaches, fraud, and potential catastrophic financial losses. The Rules generally provide for:

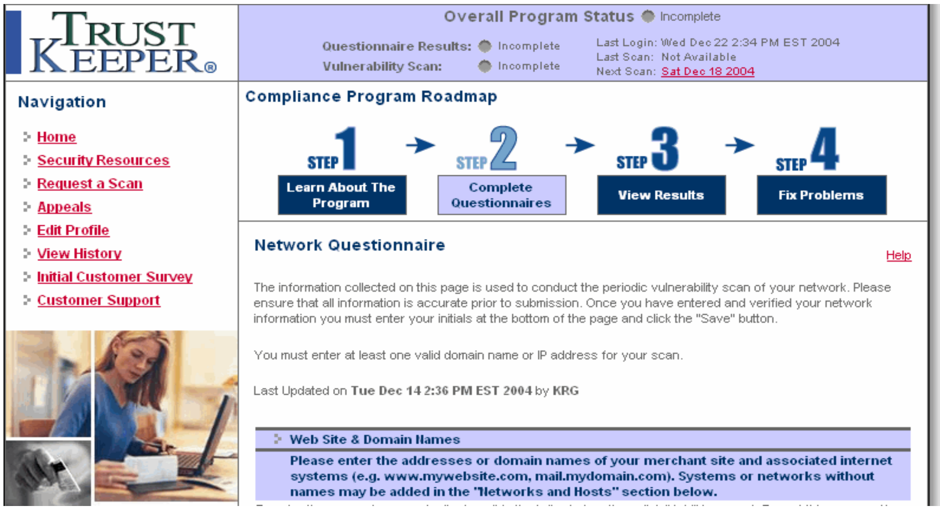
- The designation of merchants into different categories
- The requirement of certain security procedures depending upon the category
- The levying of fines for non-compliance

The security procedures require the completion of and compliance with strict security self-assessment questionnaires on an annual basis, and the performance of security network scans on a quarterly basis. The potential fees for violations can be as much as $500,000 per card association. Should Visa and MasterCard elect to levy fines for a violation, the potential liability for a single violation (e.g., security breach) would be one million dollars.

To assist agencies and other participants in complying with the PCI DSS, OSC secured the services of AmbironTrustWave (ATW) in 2005, a recognized industry leader in PCI DSS compliance assessment solutions. The State had to address the compliant issue from two perspectives: 1) the Common Payment Service gateway as a “service provider;” and 2) each participating agency as a “merchant.”

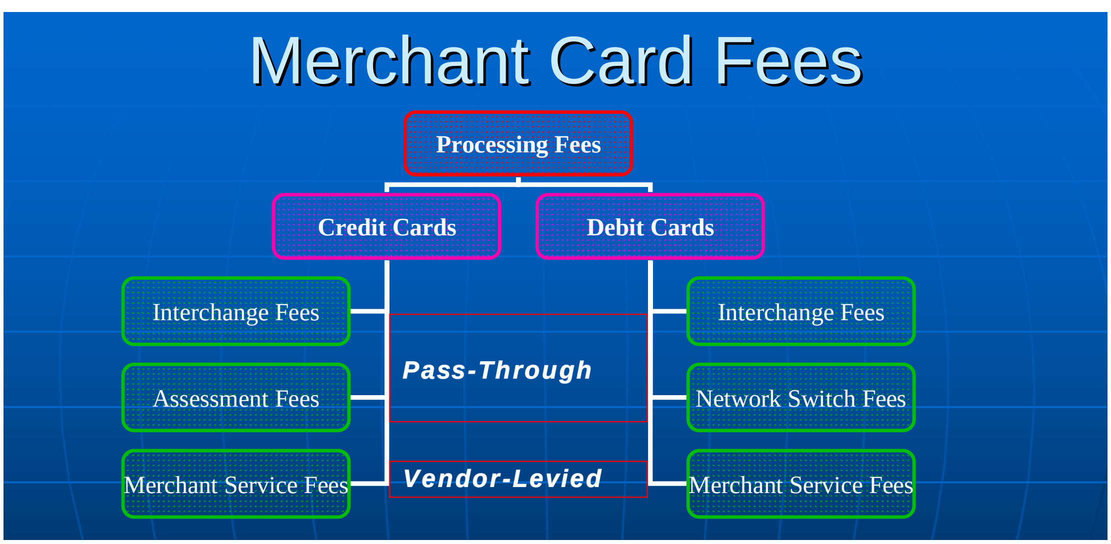
With the compliance process having begun in 2005, the OSC and ATW have continuously worked with the agencies to assist them in both becoming and remaining compliant. The CPS gateway, which processes approximately 47% of all the State’s merchant card transactions, achieved compliance in early 2006. For the most part, the agencies, acting as merchants, have been able to achieve compliance. During 2006 and 2007 one agency and one university experienced security breaches. These incidents resulted in fines levied by Visa and MasterCard, as well as resulted in costs associated with forensic investigations and cardholder notifications.

In 2006, the card industry created the PCI Security Council to provide a more coordinated approach to administering the PCI DSS. In November 2006, desirous of the State being able to have input into the rule making process, the State Controller joined the Council as a member. Due to the complexity and variety of the technological infrastructure of the various agencies, the effort has and continues to demand considerable resources of the OSC's Risk Mitigation Manager and staff.



V (B). Merchant Card Processing Fees

Processing fees associated with merchant cards can be significant. There are two types of fees, those that are "vendor-levied" (by STMS) and those that are "pass-through" to the Card Associations (e.g., Visa and MasterCard), debit card networks, and to the card issuing bank. The fees structures are complex, consisting of fixed amounts per transaction, variable rates per dollar amount, and are dependent upon other factors such as capture methods (i.e., card-present or card-not-present), as well as the type of card the cardholder presents (i.e., corporate card or consumer card). Corporate cards have higher fees.



STMS levies a $.04 fee for each transaction, regardless of the type card presented (vendor-levied fee). Assuming a transaction qualifies for the best government rate from Visa or MasterCard, on a typical $100 transaction the lowest "effective fee rate" for each would be as shown in the table below. The effective rate is higher if the payor presents a corporate Visa or MasterCard card, resulting in the fee being closer to 2% of the transaction amount. Since a component of the fee is associated with the transaction amount, the larger the transaction amount the higher the fee. The effective rate for debit cards is much lower. A disadvantage of accepting proprietary cards is that the settlement time for receiving the funds is one day longer.

Typical Fees for a $100.00 transaction – Applying Card Associations' best government rates								
	Visa		MasterCard		Amex		PIN Debit (NYCE)	
	Fee	Amount	Fee	Amount	Fee	Amount	Fee	Amount
Transaction		$100.00		$100.00		$100.00		$100.00
Interchange-%	1.43%	1.43	1.55%	1.55	2.15%	2.15	.05%	*0.00
Interchange-$	$.05	.05	$.10	.10	-	-	.06	*.45
Assessment-%	.0925%	.09	.0950%	.10	-	-	-	-
Switch Fee-$	-	-	-	-	-	-	$.0375	.04
STMS-$	$.04	.04	$.04	.04	$.04	.04	$.04	.04
Total Fee		**$1.61**		**$1.79**		**$2.19**		**$0.53**

Typical Fees for a $500.00 transaction – Applying Card Associations' best government rates								
	Visa		MasterCard		Amex		PIN Debit (NYCE)	
	Fee	Amount	Fee	Amount	Fee	Amount	Fee	Amount
Transaction		$500.00		$500.00		$500.00		$500.00
Interchange-%	1.43%	7.15	1.55%	7.75	2.15%	10.75	.05%	*0.00
Interchange-$	$.05	.05	$.10	.10	-	-	.06	*.45
Assessment-%	.0925%	.46	.0950%	.48	-	-	-	-
Switch Fee-$	-	-	-	-	-	-	$.0375	.04
STMS-$	$.04	.04	$.04	.04	$.04	.04	$.04	.04
Total Fee		**$7.70**		**$8.37**		**$10.79**		**$0.53**

There have been ongoing discussions regarding the card associations' practice of levying interchange fees for processing merchant cards, perceived by some to be excessive. Since 1916, the Federal Reserve Bank has required member banks to clear paper checks "at par." There is no such requirement for the clearing of a merchant card transaction. The card associations have specific and legal arguments that their setting of interchange fees is both legally permissible and economically rational. The legal reference is the 1984 federal appellate court decision in *National Bancard Corp. (NABANCO) v. Visa*, which held that the setting of credit card interchange rates by Visa members was permissible under the "rule of reason." The courts have also ruled that the interchange fee is pro-competitive because it was necessary to achieve stability of the Network and universality of acceptance. However, there are currently several law suits against the card networks for alleged violation of the federal antitrust laws. A white paper entitled, "The Future of Charge Card Networks" published by the AEI-Brookings Joint Center for Regulatory Studies is suggested reading. Consequently, the State is at the mercy of the card associations when it comes to the fees being levied.

V (C). Merchant Card Surcharges and Convenience Fees

One of the ongoing issues relating to merchant card services has dealt with fees associated with the processing of merchant cards. The issue has several components:

- When should the State incur the processing fee, and when should the fee be passed on to the card holder, as a convenience fee?
- Under what conditions is it permissible to charge a convenience fee?

Prior to the master services agreement in 2000, agencies operating under separate programs absorbed the fees. These programs were primarily those of the Wildlife Resources Commission, which had "receipts" to pay the fees, and the universities, which had "institutional trust funds" as a source to pay the fees. In 1999 and 2000, there were two different statutes enacted that addressed the issue, allowing agencies to charge a convenience fee:

- G.S. 147-86.22(b), enacted in 1999, which states in part: “A debtor who pays by electronic payment may be required to pay any fee or charge associated with the use of electronic payment.”
- G.S. 66-58.12(b) and (c), enacted in 2000, which states: “(b) An agency may charge a fee to cover its costs of permitting a person to complete a transaction through the World Wide Web or other means of electronic access. The fee may be applied on a per transaction basis and may be calculated either as a flat fee or a percentage fee, as determined under an agreement between a person and a public agency. The fee may be collected by the agency or by its third party agent. (c) The fee imposed under subsection (b) of this section must be approved by the Office of State Budget and Management, in consultation with the State Chief Information Officer and the Joint Legislative Commission on Governmental Operations. The revenue derived from the fee must be credited to a nonreverting agency reserve account. The funds in the account may be expended only for E-Commerce initiatives and projects approved by the State Chief Information Officer, in consultation with the Joint Legislative Oversight Committee on Information Technology. For purposes of this subsection, the term "public agencies" does not include a county, unit, special district, or other political subdivision of government.

The first issue as to when the State should incur the processing fee, and when the fee should be passed on to the card holder as a convenience fee, is one that deserves attention. A recent study by the IPSOS research firm indicated that Americans are extremely resistant to paying convenience fees. More than 78% polled say they “definitely will not” use a credit card the next time they owe federal income taxes. Instead, they will resort to the usual personal check (62%), money order (11%), or direct debit from a bank account (7%). Levying of a convenience fee is therefore a primary deterrent to the promotion of E-Commerce.

There are clearly times when the State should absorb the fee, that being when the fees and costs are not materially more than a non-electronic payment (paper check). There are also times when, while the fees and costs may be more than a non-electronic payment, it may still appropriate for the State to absorb the cost. This would be cases where (or when) the <u>majority</u> of citizens subscribing to a certain service (or paying a certain tax) would prefer to pay by merchant card if given the option and there was no extra cost. This is the “convenience and expectation” factor that the citizen is entitled to, if the manner of dealing with the government is desired to be at the same level as dealing with the private sector. When the majority of the citizens expects this convenience, then it should be provided to all citizens with the State recognizing the costs as a “cost of doing business.”

As the “digital divide” (lack of access to computers) in society disappears and merchant cards continue to become the accepted way of doing business, the “convenience and expectation” factor will force the State into developing policies that will allow for the utilization of merchant cards, and with the State recognizing the costs as a “cost of doing business.” The consequence of this is the recognition by the State that there must be line-item budgeting for the costs, similar to postage costs. Statutory changes may be needed, as most fees are statutorily set.

Because merchant card processing fees are based largely upon the dollar amount of the transaction, the costs are substantial for large dollar transactions, such as tuition payments.

The levying of surcharges and convenience fees has been a national issue for over a decade. At one time, card associations precluded merchants from charging any type of “surcharge.” The rationale given for the rules has been to prevent cardholders from being penalized for paying by merchant cards versus other methods of payments. The National Association of State Auditors, Controllers, and Treasurers (NASACT) attempted several times to get the card associations to make exceptions for governments. For the most part, the attempts have failed. In recent years the associations have relaxed their rules, allowing for “convenience fees” in certain situations.

The Government Finance Officers Association (GFOA) recognized the convenience fee issue in an Issue Brief, dated January 2005. The brief stated that governments have responded to the issue several ways:

- Use outside vendors to process card transactions (the associations have generally granted waivers to third parties, allowing them to charge percentage-based convenience fees based)
- Continue to pass on charges until the associations discover the practice and clamp down on the jurisdiction.
- Not charge a convenience fee at all, but use compensating bank balances (or other sources) to pay the fees.
- Cease to accept credit cards altogether.

There is a difference between a "surcharge" and a "convenience fee," which definitions have changed over the years, as addressed by the card industry associations.

- "Surcharge" relates to a fee charged for using a merchant card, regardless of medium, but generally applies to a face-to-face (card present) transaction.
- "Convenience fee" relates to a fee charged for using a particular medium of payment, but generally applies to payments made by electronic mediums, such as the Internet and Interactive Voice Response (IVR).

The card associations' rules are not consistent:

- Visa, MasterCard, and American Express all three prohibit surcharges (face-to-face).
- Discover has no prohibitions against surcharging for face-to-face transactions. MasterCard allows convenience fees for electronic mediums, allowing both "flat" and "percentage" fees.
- Visa allows convenience fees for electronic mediums, but only allows a "flat" fee. There are two exceptions:

    - Visa allows percentage convenience fees if a third-party (e.g., Official Payments, Link2Gov) processes the payments on behalf of the taxing authority.
    - Visa has a pilot program allowing a percentage-based convenience fee, regardless of the medium (Internet or face-to-face), but the tax authority must make application to participate in the program. Additionally, the program has certain limitations, including: 1) the payment only applies to certain tax payments (excluding fees); and 2) the convenience fee must be processed as a separate transaction, so that the cardholder's statement shows the separate charge.

There are two general statutes that agencies have been using to justify the charging of convenience fees:

- G.S. 66-58.12(b). An agency <u>may</u> charge a fee to cover its costs of permitting a person to complete a transaction through the World Wide Web or other means of electronic access. The fee may be applied on a per transaction basis and may be calculated either as a flat fee or a percentage fee, as determined under an agreement between a person and a public agency. The fee may be collected by the agency or by its third party agent.
- G.S. 147-86.22(b) **"….** A condition of payment by electronic payment is receipt by the appropriate state agency of the full amount of the account receivable owed to the state agency. A debtor who pays by electronic payment <u>may</u> be required to pay any fee or charge associated with the use of electronic payment.

The conflict of G.S. 147-86.22(b) with the card industry rules was recognized by the General Assembly when enacted in 1999. The original version of the introduced bill introduced contained the provision, "A debtor who pays by electronic payment shall be required to pay any fee or charge associated with the use of electronic payment." Upon input from the State Treasurer's Office, the bill was amended in the legislative committee to change the term "shall" to "may." This was done as a result of the Treasurer's Office advising of the Card Association Rules requirement and of the issue that was being faced by governments nationally at the time.

In 2006, the Office of the State Controller (OSC) identified the convenience fee issue as one that poses a risk of some agencies from being cited for a violation of the associations' rules. While MasterCard, Discover, and American Express allow convenience fees to be based upon percentage, Visa's rules do not. In 2005 and 2006 two agencies received notifications from Visa that they were in violation of the association's rules prohibiting a percentage-based convenience fee. The agencies were DHHS Child Support Services and UNC-Chapel Hill. The two agencies reacted differently. DHHS conceded and changed its fee to a flat fee. UNC-Chapel Hill on the other hand elected to discontinue accepting Visa cards, which is what a number of universities across the country have done. These actions by the various universities have not seemed to phase Visa. There are several other state agencies, including some universities that are subject to being cited for the same rule violation.

The OSC has recommended to agencies and universities that they alter their practice of levying percentage-based convenience fees, although seemingly permitted by state law. The state laws, which are permissive, do not require the levying of percentage-based convenience fees. Since the State has voluntarily entered into contracts with a merchant card vendor that requires the agency participants to adhere to the card associations' rules, the agencies must comply. Otherwise, Visa could require the State's vendor to terminate its agreement to process the cards on behalf of the State. Other states have either taken the same course of action, or discontinued to accept Visa cards altogether.

VI. The Future of E-Commerce

VI (A). Funding for E-Commerce

It is widely recognized that conducting transactions electronically is economical and efficient, once implemented. In the case of revenue collections, there are tremendous benefits in the form of increased investment earnings, due to the reduction of float (both mail float and check float). The challenge pertains to resources required to:

- Identify the opportunities
- Acquire the necessary supporting infrastructure and vendor services
- Obtain staffing with the appropriate technical skills

These challenges exist at both the agency level, as well as at the central level, where the statewide enterprise approach should be utilized.

G.S. 66-58.12(b) and (c) allows for an agency to charge a convenience fee for transactions conducted over the Internet, and for such fees to be credited to a nonreverting agency reserve account. The funds in the account may be expended only for E-Commerce initiatives and projects approved by the State Chief Information Officer, in consultation with the Joint Legislative Oversight Committee on Information Technology. As indicated earlier in this report, the levying of convenience fees is a deterrent to citizens choosing to make their payments electronically and therefore cannot be relied upon as an ongoing source of funding. Additionally, convenience fees only apply to merchant card transactions (inbound payments only) and are only applicable to select agencies. Agencies must be able to seek and acquire funding to pay for the costs of processing both inbound and outbound transactions, and to consider such costs as a "cost of doing business."

VI (B). Expansion of the Statewide Electronic Commerce Program

Most of the issues and challenges require additional funding. As is the case for most endeavors, seed money is required. One of the challenges is being able to justify the initial expenditures, and then require accountability for the subsequent reduction in expenditures supposedly associated with the efficiencies obtained.

There remains much to be done to continue the expansion of the Statewide Electronic Commerce Program. OSC is committed to moving the program forward, with the goal of keeping North Carolina abreast of the technology trends of the 21st century. The SECP is a critical part of the infrastructure upon which all government programs run, from the collection of taxes to the payment of benefits. Without a successful SECP, the State will continue to be mired down in paper.

The State's central technical service organizations must develop and implement new services to support the new technologies, business processes, and vendor relationships created by e-government. Technologies must be assessed, implemented, and operated efficiently. Public/private partnerships must be investigated. Staffing and policy strategies must be reviewed.

North Carolina State Government initially addressed E-Commerce in the 1998 report entitled "A New Way of Doing Business", a document directed by then Lt. Governor Dennis Wicker and prepared by a work group led by Secretary of State Elaine Marshall. A second report was directed by the Office of Information Technology in 2001 entitled "E-Government—Using Technology to Transform North Carolina's Governmental Service Operations in the Digital Age." These two reports laid the groundwork and identified opportunities for E-government in North Carolina as we moved to the 21st Century.

With over five years experience in E-Commerce by state agencies, it is time to evaluate the status of the program and to outline a more refined strategic plan for the future of E-Commerce for state government. As the business arm of state government and the agency with statutory authority for disbursements, we believe OSC should be directed to conduct such a study that will incorporate all issues addressed herein and report back to the 2008 Session of the General Assembly with an E-Commerce Strategic Plan and proposed legislation for consideration by the General Assembly. The study should include enterprise agency representation and should be specific with recommendations for a course of action to maximize electronic commerce activity for North Carolina State Government.

At a minimum, the study should address the following issues:

- Utilization of EFT (direct deposit) for disbursements
- Utilization of EFT for revenue collections for all agencies
- Agency adherence with credit card associations' rules regarding security standards
- Agency adherence with credit card associations' rules regarding convenience fees
- Lack of consistency in Statewide Implementation of E-Commerce
- The Cost of E-Commerce in North Carolina State Government

VII. Glossary

Automated Clearing House (ACH): A regional organization used by member banks to electronically transfer funds between members. The ACH utilized by North Carolina banks is housed within the Federal Reserve Bank.

Automated Clearing House (ACH) Transactions: Refers to the various types of EFT transactions conducted through the ACH. Includes outbound transactions and inbound transactions.

AmbironTrustWave (ATW): A qualified security assessor contracted by OSC to assist participants in the State's MSA for merchant card processors to comply with the Payment Card Industry Data Security Standard.

Bank Draft: A method of collecting funds electronically through the ACH network. Also referred to as an ACH Debit.

Building Enterprise Access for NC's Core Operation Needs (BEACON): Program being implanted in phases over the next seven years to update the fundamentals of state government operations, to include human resources, payroll, budget management, taxation, data storage, and accounting.

Card Association: A group of financial institutions formed for sponsoring a bankcard program, using a common processing and administrative center. The two most well known card associations are Visa and MasterCard.

Card Issuer: 1) The financial institution or retailer that authorizes the issuance of a card to a consumer (or another organization), and is liable for the use of the card. The issuer retains full authority over the use of the card by the person to whom the card is issued. 2) Any bank or organization that issues, or causes to be issued, bankcards to those who apply for them. 3) Any organization that uses or issues a personal identification number (PIN).

Card-Present Transaction: Any transaction where the card is present, allowing the card capture to be performed by swiping or imprinting the card.

Card-Not-Present Transaction: Any transaction where the card is not presented, such as a mail order or web purchase.

Card Verification Code (CVC): A unique value calculated from the data encoded on the magnetic stripe of a MasterCard card, validating card information during the authorization process.

Card Verification Value (CVV): A unique value calculated from the data encoded on the magnetic stripe of a VISA card, validating card information during the authorization process.

Common Payment Service (CPS): A payment gateways service provided by OSC through the Office of Information Technology (ITS) that allows agencies having Internet payment applications to process transactions with either or both of the two E-Commerce vendors: 1) SunTrust Merchant Services for merchant card transactions; or 2) Wachovia Bank for EFT transactions.

Convenience Fee: A fee assessed to a cardholder by a merchant for presenting the card for payment. Generally refers to card-not-present transactions. Different than a surcharge, which refers to a card-present transaction.

Core Banking System (CB$): System provided by the State Treasurer to entities having funds on deposit with the State Treasurer, providing online banking access.

Credit Card: A plastic card with a credit limit used to purchase goods and services and to obtain cash advances on credit for which a cardholder is subsequently billed by the issuer for repayment of the credit extended.

Debit Card: Any card that primarily accesses a Deposit Account maintained at a financial institution. Can also be utilized by a government entity to disburse funds, such a payroll or unemployment benefits.

Direct Deposit: Generic term for an ACH credit. A method of remitting funds electronically through the ACH network, either for payroll or vendor payments.

E-Check: Generic term for an ACH debit to a consumer account that is originated on the Internet, at the point of sale, over the telephone, or by bill payment sent through the mail.

E-Commerce: The conducting of transactions or the conducting of business electronically. There are two types of E-Commerce activities, those that involve financial transactions, and those that do not involve financial transactions.

E-Commerce Work Group (ECWG): Work group created in 2001 that issued the report entitled, "*E-Government – Using Technology to Transform North Carolina's Governmental Service Operations in the Digital Age*."

Electronic Benefits Transfer (EBT): The provision of government entitlement programs to those individuals who are entitled to receive such entitlements or benefits through the use of magnetically striped or other cards capable of storing information regarding cardholders and capable of accessing ATM and POS Terminals to receive distribution of such entitlements or benefits. The Department of Health and Human Services uses EBT to distribute food stamp benefits.

Electronic Funds Transfer (EFT): Generic term to describe transactions conducted electronically, primarily including two types of transactions: ACH transactions and wire transfers. In some cases the definition also includes merchant card transactions.

Federal Reserve Bank (FRB): Organization that facilitates the movement of funds among member banks, to include transactions associated with E-Commerce activities. The FRB houses the nation's primary Automated Clearing House. The FRB also issues certain regulations, to include Regulation E.

Gateway Service: The interconnection between two networks with different communication protocols. Used in state government to process payment transactions captured on an agency's website and then transmitted to either the merchant card processor or the EFT bank.

Inbound Transactions: Refers to payments that are collections, with funds being deposited with the State Treasurer.

Interchange Fee: Fees paid by the acquirer to the issuer to compensate for transaction-related costs. VISA and MasterCard establish interchange fee rates.

Inter/Intra Governmental Transfers: Refers to program offered by OSC to state agencies that utilize the North Caroling Accounting System (NCAS) to effect payments between agencies without having to use the commercial banking system.

Master Service Agreement (MSA): Agreement between the State and a vendor to provide a statewide E-Commerce activity, such as merchant card processing or EFT processing.

Merchant: A retailer, or any other person, firm, corporation, or entity that, according to a Merchant Agreement, agrees to accept credit cards, debit cards, or both, when properly presented.

Merchant Card: A card issued by a card issuer, generally in the form of a credit card, debit card, or proprietary card.

National Automated Clearing House Association (NACHA): The national trade organization for electronic payment associations, which establishes the rules, industry standards, and procedures governing the exchange of commercial ACH payments by depository financial institutions.

North Carolina Accounting System (NCAS): System provided state agencies by the OSC to accommodate the accounting functions performed by the various agencies.

Office of the State Controller (OSC): Office charged with the responsibility of issuing policies regarding E-Commerce in state government, pursuant to SB 222.

Outbound Transactions: Refers to payments that are disbursements from the State Treasurer.

Point-of-Sale (POS) Terminal: A device placed in a merchant location that is connected to the bank's system or authorization service provider via telephone lines and is designed to authorize, record and forward data by electronic means for each sale.

Pass-through Fees: Fees charged by credit card associations and debit card networks to process a credit card or debit card. In the case of credit cards, the fees are interchange fees and assessment fees. In the case of debit cards, the fees are switch fees. The fees are different than vendor-levied fees.

Payment Card Industry Data Security Standard (PCI DSS): A multifaceted security standard that includes requirements for security management, policies, procedures, network architecture, software design and other critical protective measures associated with credit card account data.

Primary Account Number (PAN): The number encoded on Track 2 of a magnetic stripe of a credit card used by the Issuer Member to identify a cardholder.

Proprietary Card: A card issued by a company other than a financial institution for access to their credit or deposit accounts. Examples include American Express and Discover.

Quest Operating Rules: Operating Rules issued by NACHA that govern Electronic Benefits Cards (which are used for the distribution food stamp benefits in North Carolina).

Regulation E: The regulation, all amendments thereto and official interpretations thereof (12 C.F.R. part 205) promulgated by the Board of Governors of the Federal Reserve System implementing Title IX of the Consumer Credit Protection Act (15 U.S.C. § 1601 et. seq.) which is known as the Electronic Fund Transfer Act.

Senate Bill 222: Legislation passed during the 1999 session that gave the OSC authority to issue policies regarding E-Commerce activities in state government, and that promoted the statewide enterprise approach.

State Warrant: Paper check issued, or authorized to be issued, by the State Controller, and drawn on the State Treasurer.

Statewide Electronic Payment Program (SECP): Program administered by the OSC, consisting of three primary components: Merchant Card Program, Electronic Funds Transfer Program, and Inter/Intra Governmental Transfers Program.

Stored-Value Card: A pre-paid payment card that stores a monetary value from which the purchase amount is deducted from the card each time the card is used. Is normally a debit card.

SunTrust Merchant Services (STMS): Vendor contracted with by the OSC to process merchant cards on a statewide enterprise basis.

Surcharge: A fee assessed to a cardholder by a merchant for presenting the card for payment. Generally refers to a card-present transaction. Different than a convenience fee, which refers to a card-not-present transaction.

TrustKeeper: Portal provided by the OSC vendor, AmbironTrustWave, to allow merchant card participants to enroll to facilitate the validation of their compliance with the Payment Card Industry Data Security Standard.

Unbanked: Refers to individuals who do not have bank accounts, and therefore are not eligible to participate in direct deposit.

Vendor-Levied Fees: Fees levied by a vendor, such as the merchant card vendor or EFT vendor, to process transactions on behalf of the State. Does not include pass-through fees that are associated with merchant card transactions, charged by the credit card associations or debit card switch networks.

Wachovia Bank: Vendor contracted with by the OSC to process electronic funds transfer transactions on a statewide enterprise basis.