

## NOMINATION FORM

**Title:** NC Department of Revenue Sales and Use Online Filing and Payment

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## **North Carolina Department of Revenue - Sales & Use Online Filing and Payments EXECUTIVE SUMMARY**

In November 2002, North Carolina Department of Revenue (NCDOR) implemented its Sales and Use Online Filing and Payments system that allowed taxpayers to file tax returns and pay their obligation online via the Internet. In the first six months of operations, 6,656 taxpayers have taken advantage of the capability, filing 14,766 returns and paying \$110,677,080 in tax obligations.

NCDOR originally provided an EDI solution, using nationally accepted EDI standards, for use by large semi-monthly filers to file their returns. No payment method was necessary since these taxpayers already paid using the Department's Electronic Funds Transfer (EFT) program. In 2002, the system was further expanded to allow all taxpayers, not just large and frequent filers, to complete the Sales & Use Tax returns online and to pay their tax liability electronically, using credit card or ACH/Debit transactions. Both methods, EDI and online, included the Sales and Use Tax return, E-500, and the associated breakdown schedules, E-536 and E-543, for local county and municipal distributions.

The Sales and Use Online Filing and Payments system has two components: the Internet interface to the taxpayer and the backend data processing and reporting component. The Internet screens provide the ability to upload the EDI files or enter the tax return information online. The payment information is processed through the system to a Common Payment Services system, which provide enterprise, statewide financial transaction processing, both credit card and ACH/debit, for State agencies.

The backend data processing and reporting component supports the operational needs of the internal users. These users require a means to reconcile and certify payments. Internal DOR users who provided taxpayer assistance also need a means for reviewing information a taxpayer entered, confirmation page copies, and other essential statistical reports.

As part of the implementation, a business process re-engineering effort was undertaken to ensure ongoing customer satisfaction and improved department efficiencies. NCDOR has restructured its organization to include an E-Services Unit. E-Services encompasses all aspects of electronic commerce (B2B and B2C) including, but not limited to, Individual Income Electronic Filing, Individual Income Voucher Payments, Sales & Use Online Filing and Payments, and Withholding Online Filing and Payments, currently in development. This unit combines personnel from the Electronic Filing Unit, Document Payments & Processing Unit, and Taxpayer Assistance Division.

NCDOR is and will continue to realize significant intangible and tangible benefits through the implementation of the Sales & Use Online Filing and Payments project. Benefits calculations assumed 5% of business taxpayers would utilize online filing the first year with an additional increase of 5% each year thereafter. Using this assumption, a tangible savings of \$162,000 per year is anticipated and the total investment of \$204,200 and annual operating costs of \$81,300 will be recovered in Year 3 of operations. The volumes from the first six months are on track to meet this projection.

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**North Carolina Department of Revenue - Sales & Use Online Filing and Payments**

**A. Description**

There are approximately 180,000 taxpayers filing Sales and Use Tax returns with the Department of Revenue providing the State with tax receipts in excess of \$5 billion dollars annually. The previous process involved a considerable amount of paper handling and manual processing that did not provide an expedient means of collecting taxes due the State nor a convenient method of filing and paying taxes for the taxpayer.

Prompted by legislation requiring the ability for semi-monthly filers to submit returns electronically, the NC Department of Revenue (NCDOR) developed an automated method for submission of Sales & Use tax return files. The system, then known as Sales ELF, allowed business taxpayers to upload their returns using nationally accepted standard EDI file formats. The initial implementation included the Sales and Use Tax return, E-500, and the associated breakdown schedules, E-536 and E-543, for local county and municipal distributions. No payment capability was provided because these taxpayers already were required to pay their obligation through an existing Electronic Funds Transfer mechanism.

In November 2002, NCDOR implemented the second phase of Sales ELF, now known as Sales & Use Online Filing and Payments, as part of the Department's e-commerce strategic initiatives. The second phase included further automation that allowed all taxpayers, not just large and frequent filers, to complete the Sales & Use Tax returns online and to pay their tax liability electronically, using credit card or ACH/Debit transactions. The EDI capability from Phase I was retained and integrated into the new online function.

The Sales and Use Online Filing and Payments systems has two components:

- the online interface to the taxpayer and
- the backend data processing and reporting component.

The online interface component was developed using HTML and Java servlets running in a Sun Solaris environment. To authenticate current filers to use the system, JDBC driver software is used to validate taxpayer id numbers against an existing mainframe DB2 database. Once a user's id is verified, the taxpayer can choose to securely upload an EDI file or enter the return information online through web screens. The Internet session of the taxpayer and all data transmissions are secured using SSL. To process the payment requests, NCDOR utilizes the Common Payment Services (CPS) mechanism, provided by the State of North Carolina as an enterprise service, to accept credit card or ACH/Debit transactions. CPS also allows taxpayers to warehouse their ACH/Debit payments for up to sixty days.

The backend data processing and reporting component is called the Online Filing and Payments (OFP) system and supports the operational needs of the internal users. These users require a means to reconcile and certify payments sent through CPS to the bank. NCDOR users who provided taxpayer assistance also need a means for reviewing what a taxpayer entered, confirmation page copies, and other essential statistical reports. NCDOR's environment to create this system consists of the following: Solaris running on Sun UNIX

servers, IBM’s UDB/DB2 databases, JBuilder to create Java and CORBA code, and JReport tool to develop reports.

**B. Significance of Improvements**

The goal of this project was not only to allow taxpayers to file and pay online, but also to include a business process re-engineering effort to ensure ongoing customer satisfaction and improved department efficiencies. NCDOR has achieved both of these goals. First, Sales & Use taxpayers have been able to file returns and pay taxes online for seven months. Second, NCDOR has restructured its organization to include an E-Services Unit. E-Services encompasses all aspects of electronic commerce (B2B and B2C) including, but not limited to, Individual Income electronic filing, Individual Income Voucher Payments, Sales & Use Online Filing and Payments, and Withholding Online Filing and Payments, currently in development. This unit combines personnel from the Electronic Filing Unit, Document Payments & Processing Unit, and Taxpayer Assistance Division. This newly formed group is responsible for the following:

- Conducting all NCDOR training for E-Services, including Sales & Use Online.
- Serving as a “Help Desk” that provides assistance to taxpayers with their questions, problems, and setup to participate in the EDI program.
- Handling the majority of the internal and external publicity and marketing involving Sales Online and all other online filing functions.

The creation of the new unit, along with the development of the new service, has improved the Department’s ability to collect monies due the State sooner, since the Department no longer has to wait to receive the check in the mail and deposit the money. With CPS, NCDOR can interface with the bank earlier to certify monies and begin earning interest on the funds. The State also gains efficiencies with improved accuracy of data on returns. The return can now be processed without manual handling or review and posted to the taxpayers account more quickly. All of these improvements decrease the amount work that was previously done by employees. Furthermore, the end of month reconciliation required for Sales and Use distributions is completed more timely and accurately.

**C. Benefits**

NCDOR is and will continue to realize significant intangible and tangible benefits through the implementation of the Sales & Use Online Filing and Payments project. Intangible benefits cannot be quantified, but many ultimately result in an increase in capacity, decrease in costs, or cost avoidance. The table below lists the tangible and intangible benefits NCDOR is realizing from the implementation of Sales & Use Online Filing and Payments.

Intangible and Tangible Benefits	✓ = intangible	\$ = tangible
Increased taxpayer satisfaction	✓	
Increased taxpayer convenience and access to DOR	✓	
Improved accuracy of data	✓	
Reduced resource requirements		\$
Cost avoidance		\$
Interest income		\$

The successful implementation and subsequent benefits realized from implementing Sales & Use Online Filing and Payments have been heavily dependent on the percent of the filing population that have chosen thus far to take advantage of this service. The information below details the assumptions used to calculate the resulting cumulative tangible benefits.

### **Tangible Benefits**

Benefits were calculated assuming 5% of business taxpayers would utilize online filing the first year with an additional increase of 5% each year thereafter for at least 4 years. NCDOR has approximately 180,000 taxpayers filing Sales and Use returns. 5% would equate to 9000 taxpayers. All estimates are rounded to the nearest \$100.

- ❑ Reduced resource requirements
  - .5 FTE available for redirection in data correction per year totaling \$12,000/yr increasing by \$12,000 each year as volume increases
  - 2 FTE available for redirection from processing of paper per year totaling \$48,000/yr increasing by \$48,000 each year as volume increases
- ❑ Cost Avoidance
  - Reduction in printed forms equal to \$6400 the first year and increasing by \$6400 each year
  - Reduction in postage resulting from fewer mailings of approximately \$8900 the first year and increasing by \$8900 each year
- ❑ Interest income
  - Interest income estimated at \$86,700 year one assuming Sales and Use tax payments are made online by their due date in lieu of payments being postmarked by their due date, resulting in a two days savings. This estimate will increase by \$86,700 each year thereafter.

**D. Return on Investment**

<b>Return on Investment @ 5% Estimated Annual Growth</b>	<b>Y1</b>	<b>Y2</b>	<b>Y3</b>	<b>Y4</b>
Cost	\$204,200	\$81,300	\$81,300	\$81,300
Estimated Benefits **	\$0	\$162,000	\$324,000	\$486,000
<b>ROI</b>	<b>(\$204,200)</b>	<b>(\$123,500)</b>	<b>\$119,200</b>	<b>\$523,900</b>

\*\* Note: some benefits will be derived in the first year, such as interest income. However, for purposes of determining ROI, we have assumed \$0.

In the first 6 months of operation, 6656 taxpayers have filed 14,766 returns with payments totaling \$110,677,080. These represent a combination of semi-monthly, monthly and quarterly filers who have submitted all combinations of E-500, E-536, and E-543 returns, and is on target to achieve the 5% estimate.

Additionally, some of the payments have been made by semi-monthly filers, which would have previously paid their obligation through the more expensive EFT program. Every transaction that is converted from EFT to the Online Sales and Use payment method saves the Department \$.30 to \$.50, depending on the method of payment through EFT. These are unintended benefits and further strengthen the ROI.