NEBRASKA DEPARTMEN

2040 NEBRASKA

Good Life. Great Journey.

STATEWIDE TRANSPORTATION PLAN

Revenue Forecasting Tool

October 26, 2020

This technical memorandum is part of the Nebraska 2040 Statewide Transportation Plan. This technical memorandum describes the data, methodology, and process for developing and using the revenue forecast tool developed for the plan.

Contents

1 Introduction....1
2 Source Data....1
2.1 Statutory Provisions....1
2.1.1 Nebraska Revised Statutes....2
2.1.2 Federal Law....2
2.2 NDOT Historical Revenue Data....3
2.3 Other State Data....4
2.4 Federal Data....5
2.4.1 Formula apportionments from the Highway Trust Fund....5
2.4.2 Economic and Demographic Data....5
3 The Revenue Forecasting Tool....6
3.1 Historical Data....6
3.1.1 'NDMV Registration Data'....6
3.1.2 'Revenue Sources'....6
3.1.3 'Data Base'....7
3.2 FFY 2020 Federal Apportionments....7
3.2.1 'FHWA Apportionment'....7
3.2.2 'FTA Apportionment'....7
3.3 Nebraska State Sales Tax Forecast....8
3.3.1 'Population'....8
3.3.2 'Inflation'....8
3.3.3 'Real GDP'....8
3.3.4 'Nominal GDP'....8
3.3.5 'Net Taxable Sales'....9
3.3.6 'State Sales Tax'....9
3.4 Projections of Vehicle Fleet Characteristics and Fuel Consumption....9
3.4.1 'EIA Fleet Energy Use Forecast'....9
3.4.2 'Fleet Dynamics'....10
3.4.3 'Fuel Tax Dynamics'....10
3.5 Forecasts of Transportation-related Revenue Sources....10

3.5.1 'State Fuel Taxes' 10
3.5.2 'Motor Vehicle Sales Taxes' 10
3.5.3 'Registrations' 11
3.5.4 'Grade Crossing' 11
3.5.5 'Miscellaneous' 11
3.5.6 'Interest Earnings' 12
3.6 Summary Tables 12
3.6.1 'Current Dollars' 12
3.6.2 'Constant 2019 Dollars' 12
3.6.3 'By Fund' 12
3.6.4 'By Funding Source' 12
4 The Baseline Forecast 13

List of Tables

Table 2-1: Nebraska Fuel Tax Rates - January - June 2020 (Cents Per Gallon) 2
Table 2-2: Secondary NDOT Funds and their Funding Sources 4
Table 2-3: Summary of Federal Data and Projection Sources 5
Table 4-1: NDOT STP 2040 Revenue By Funding Source (millions of current dollars) 13
Table 4-2: NDOT STP 2040 Revenue By Fund (millions of current dollars) 14

1 Introduction

To understand the challenge of developing and maintaining Nebraska's transportation system, it is important to understand Nebraska Department of Transportation (NDOT)'s sources of revenue and how they are projected to change. A forecast that accurately reflects the complex structure of NDOT's funding sources and how they generate revenue over time is critical to understanding NDOT's long-run structural fiscal condition under current law.

Scenario analysis powered by the forecast's assumptions and parameters can inform policy discussions around the long-run mix of revenue sources to NDOT.

This technical memorandum sets forth the baseline revenue forecast results for the 2040 Nebraska Statewide Transportation Plan and accompanies the spreadsheet-based forecasting tool developed for NDOT staff as Task 6 of the plan. Using detailed historical data from NDOT, other Nebraska state agencies, and the federal government, the consultant team calibrated the model to state fiscal year (SFY) 2019 data.

Assumptions about how relevant economic, demographic and technological factors are predicted to change over time power the revenue dynamics of the model. In the baseline model, these assumptions are set to values corresponding to trends in historical data; however, the model user may adjust them for scenario analysis.

The baseline revenue forecast for the 2040 Nebraska Statewide Transportation plan is $16.5 billion in current dollars, of which $11.0 billion are state funds and $5.5 billion are federal highway and transit funds.

2 Source Data

The revenue forecast tool is based on three primary data sources: NDOT funding allocation statutory provisions; historical NDOT monthly revenue information maintained by NDOT staff; and data regarding vehicle ownership, fuel consumption, and other important economic, demographic, and technological factors driving NDOT's revenue sources maintained by other state and federal agencies.

2.1 Statutory Provisions

The revenue forecasting tool's structure is informed by state and federal laws. The spreadsheet's structure and logic represent formulas regarding tax rates and the apportionment of receipts from various revenue sources to NDOT.

2.1.1 Nebraska Revised Statutes

The Nebraska Revised Statutes set forth the levels of taxes and fees with respect to the ownership or operation of a motor vehicle, the allocation formulas to various state funds, and their ultimate apportionment to NDOT, other state agencies, and local governments.

As of the writing of this technical memo, Nebraska statutes authorize excise taxes of 29.3 cents per gallon on gasoline and diesel fuel sold for highway use to be allocated for surface transportation uses. These are partially fixed in statute and partially vary based on the average wholesale price of fuel and by the amount necessary to support an appropriation to NDOT from the Nebraska Legislature.

Receipts are deposited in the State Highway Trust Fund and are subsequently transferred to the Highway Cash Fund (an NDOT revenue source) or to the Highway Allocation Fund, where they are apportioned to local governments by formula. **Table 2-1** shows tax rates as of the writing of this technical memo and their statutory formula allocation to the Highway Cash Fund and the Highway Allocation Fund.[1]

Table 2-1: Nebraska Fuel Tax Rates - January - June 2020 (Cents Per Gallon)

Tax	To Highway Cash Fund	To Highway Allocation Fund	Total Tax
Fixed Tax	7.5	2.8	10.3
Incremental Tax	2.0	4.0	6.0
Variable Tax	2.8	0.0	2.8
Wholesale Tax	6.7	3.5	10.2
Total Tax	**19.0**	**10.3**	**29.3**

Other major state sources of revenue to NDOT routed through the state Highway Trust Fund include a 5.5 percent tax on the sale or lease of motor vehicles, and annual motor vehicle registration fees. Receipts from these revenue sources are apportioned by formula to the Highway Cash Fund and the Highway Allocation Fund. A small fraction of Nebraska's general-purpose sales tax proceeds is transferred to NDOT per the Build Nebraska Act, which sunsets at the end of SFY 2033. Revenues generated from Nebraska's railroad excise tax are allocated to NDOT for grade crossing improvements.

2.1.2 Federal Law

The federal government levies taxes on the sale of gasoline/gasohol, diesel, special fuels, tires for commercial trucks, truck and trailer sales, and on the use of heavy trucks above 55,000 pounds. Receipts from these sales are deposited in the federal Highway Trust Fund, from which the federal highway and transit programs are funded.[2]

The Fixing America's Surface Transportation (FAST) Act (Pub. L. No. 114-94) is the current federal legislation as of the writing of this technical memo authorizing the federal surface transportation program. The FAST Act funds six formula programs for federal-aid highways:

- National Highway Performance Program (NHPP);
- Surface Transportation Block Grant Program (STBG);
- Highway Safety Improvement Program (HSIP);
- Congestion Mitigation and Air Quality Improvement Program (CMAQ);
- Metropolitan Planning (MPP); and
- The National Highway Freight Program (NHFP).

For federal fiscal year 2020, Nebraska was apportioned 0.74% of all formula funding in the Federal-Aid Highway Program (FAHP)[3]. This amounts to $318.4 million, of which $288.6 million is available to NDOT. Obligation limitations enacted in the 2020 Consolidated Appropriations Act restrict NDOT's authority to obligate funds to 90.6 percent of its 2020 apportionment, or $261.5 million.[4] In addition, Nebraska received an additional $45 million in federal spending authority from the August 2020 redistribution.

Federal transit funding is apportioned among the states and their major metropolitan areas through a variety of programs by formula and by competitive grant. Major federal transit programs include:

- Statewide Metropolitan Planning;
- Urbanized Area Formula Appropriations;
- Fixed Guideway Capital Allocation Grants;
- Mobility of Seniors and Individuals with Disabilities;
- Rural Area Formula Apportionments,
- Rural Transportation Assistance Program Allocations,
- Appalachian Development Public Transportation Assistance Program;
- Public Transportation on Indian Reservations;
- Buses and Bus Facilities; and
- State Safety Oversight.

The FFY 2020 appropriation program is $12.8 billion, of which $2.8 billion is earmarks and competitive grants and $10.0 billion is apportioned to the states and major metropolitan areas by formula. Nebraska's share of FFY 2020 formula funding is $30.2 million. $14.2 million of Nebraska's FFY 2020 formula funding is routed through NDOT.[5]

2.2 NDOT Historical Revenue Data

NDOT staff keeps a detailed spreadsheet of monthly receipts from each of the revenue sources that fund the Department's operations. For the Roads Operations Cash Fund (NDOT's principal highway-related fund), the spreadsheet includes monthly data on gross revenue from fuel taxes, net

proceeds to NDOT after credits and transfers allowed in state law, NDOT's share of International Fuel Tax Agreement (IFTA) revenue, revenues from motor vehicle sales and vehicle registrations, including through the International Registration Plan (IRP), miscellaneous revenue generated by NDOT through the sale of supplies, materials, fixed assets, oversize/overweight permits, and interest earnings on the fund's cash balance.

The spreadsheet also tracks revenue to NDOT's other major funds. Table 2-2 summarizes NDOT's secondary state funds and their funding sources.

Table 2-2: Secondary NDOT Funds and their Funding Sources

Fund	Funding Source(s)
Grade Crossing Fund	Railroad Excise tax of $0.075 per mile plus $100 per public grade crossing; allocation of motor vehicle sales tax proceeds
Recreation Road Fund	$1.50 surcharge on vehicle registrations
State Aid Bridge Fund	Monthly transfer from Highway Trust Fund of $64,000
State Highway Capital Improvement Fund	85% of 0.25 percentage points of the 5.5% state sales tax revenue allocated to the General Fund
Transportation Infrastructure Bank	2.0 cents of Incremental fuel tax through June 2033

2.3 Other State Data

The forecast tool incorporates historical data from the Nebraska Department of Motor Vehicles (NDMV), the Nebraska Department of Revenue (NDR) and the State Accounting Division of the Nebraska Department of Administrative Services (NDAS), and projections from the University of Nebraska Omaha (UNO).

The baseline forecast is calibrated to 2018 NDMV data on the total number of registered vehicles. Detailed NDAS data on annual gross and net state sales revenues informs the baseline forecast of Build Nebraska Act revenue to the State Highway Capital Improvement Fund, and NDR data on taxable motor vehicle sales informs the forecast of motor vehicle sales tax revenue, an important component of NDOT receipts in the Roads Operations Cash Fund. Population projections from UNO underlie the model's assumptions on annual population growth, which drive forecasts of several NDOT revenue sources.

2.4 Federal Data

2.4.1 Formula apportionments from the Highway Trust Fund

The baseline forecast of federal highway and transit revenue to NDOT is calibrated to the apportionment tables published by FHWA and FTA pursuant to the federal 2020 Consolidated Appropriations Act.

2.4.2 Economic and Demographic Data

Federal data and projections calibrate a variety of the factors that drive revenue projections in the forecast tool. **Table 2-3** summarizes the data sources and projections from federal agencies that are incorporated into the forecast tool.

Table 2-3: Summary of Federal Data and Projection Sources

Data / Projection	Data / Projection Source(s)
Population Figures	U.S. Bureau of the Census
Consumer Price Index	U.S. Bureau of Labor Statistics
Nominal and Real Gross Domestic Product	U.S. Department of Commerce Bureau of Economic Analysis via Federal Reserve Bank of St. Louis
Vehicle Miles Traveled	Federal Highway Administration
Fuel Consumption	Federal Highway Administration
Fuel Consumption Projections	U.S. Energy Information Administration
Fuel Economy	U.S. Environmental Protection Administration

3 The Revenue Forecasting Tool

The revenue forecasting tool is a linked Microsoft Excel spreadsheet that uses historical revenue data and data on economic, demographic, and technological drivers of NDOT's revenue sources to project annual revenues through the 2040 Plan horizon.

Where available, the forecast incorporates projections published by cognizant state and federal agencies; otherwise, forecasts of annual growth in revenue sources are driven by estimated compound average annual growth rates in historical data.

Model users can change the tool's calibration, its parameters regarding statutory allocations of revenue sources, and its assumptions around annual growth in the factors that drive revenue to NDOT. Any cell that is highlighted in light blue with a thin black outline is a parameter that may be changed by the model user. The model engine will recalculate forecast outputs automatically whenever these cells are changed. Unless otherwise noted, all other figures in the model are calculations driven by the parameters in blue cells or in the NDOT historical revenue data tab. Cells not colored light blue should not be changed by the model user.

For ease of reference, the forecast tool's tabs are grouped and color-coded by function. The following subsections explain the function of the tabs, whose output is the summary tables displaying all revenue to NDOT by fund and by revenue source.

3.1 Historical Data

Three red tabs are the bedrock data on NDOT revenues, revenue sources, and the number of registered motor vehicles in Nebraska. Base-year calibration and many of the model's assumptions on annual growth are calculated from the figures in these tabs.

3.1.1 'NDMV Registration Data'

NDMV data on calendar year 2018 motor vehicles calibrates the 'Fleet Dynamics' tab, which is a scenario of how the characteristics of Nebraska's vehicle fleet changes over time. The 'Fleet Dynamics' tab is one of five scenarios the model user can specify to drive forecasts of motor fuel receipts over time. It also projects revenue from Nebraska's Alternative Fuel Fee. Snowmobiles, government-owned vehicles, and trailers are excluded from the baseline figure of 2.1 million registered vehicles.[6]

3.1.2 'Revenue Sources'

This tab summarizes the fund names, numbers, codes, descriptions, legislative citations, tax/fee rates, and other descriptive information for NDOT's revenue sources. It is adapted from a Microsoft Word document

maintained by NDOT staff. This tab's figures are not tied to figures in other tabs of the forecast tool; rather, it serves as a reference for the model user.

3.1.3 'Data Base'

This tab contains detailed information on NDOT's monthly receipts from all relevant funding sources to all major funds from which NDOT is authorized to spend. Many of the revenue sources have monthly data going back to July 1995. This tab informs the calibration of all state sources of funding in the baseline model, as well as the assumed future growth rates for several funding sources.

3.2 FFY 2020 Federal Apportionments

Two blue tabs are the model's baseline for federal highway and transit funding apportionments to NDOT. In the baseline forecast, sources of federal funding are assumed to remain at FFY 2020 levels through the forecast horizon due to uncertainty about the solvency of the Federal Highway Trust Fund and the lack of a long-term funding act for surface transportation.

3.2.1 'FHWA Apportionment'

This tab adapts a table published by the FHWA summarizing FFY 2020 apportionments to states by major program net of any penalty adjustments and post-apportionment set-asides such as the Transportation Alternatives (TA) and State Planning and Research (SPR) programs.[7]

To arrive at the FFY 2020 apportionment available to NDOT, the apportionment figures for Nebraska are adjusted by amounts apportioned to non-NDOT governmental units and amounts reserved for projects on bridges located outside the national highway system.

To reach the FFY 2020 apportionment available to Nebraska, the model accounts for STBG funds apportioned directly to the municipalities of Lincoln and Omaha, for STBG funds reserved for off-system bridges, for MPP funds apportioned to Nebraska's metropolitan planning organizations (MPOs), and for TA program funds reserved to Lincoln and Omaha.

The net FFY 2020 apportionment available to NDOT ($288.6 million) is further adjusted by the 90.6% obligation limitation factor enacted in the 2020 Consolidated Appropriations Act, leaving $261.5 million available to be obligated by NDOT for eligible highway projects and programs.[4] The model user can specify annual growth rate assumptions for the gross apportionment available to NDOT and the obligation limitation factor that drives how much federal highway revenue NDOT can actually receive in any given year.

3.2.2 'FTA Apportionment'

This tab contains a table listing the total FFY 2020 apportionment for all major federal transit programs, the amount apportioned to Nebraska by

formula, and the fraction of that amount that flows to or through NDOT.[5] The model makes no assumption about the level of competitive grants or earmarks received by transit providers in Nebraska, or the extent to which such one-time funds are routed through NDOT. The model user can specify assumed annual growth rates in annual formula funding received by NDOT.

3.3 Nebraska State Sales Tax Forecast

The six yellow tabs comprise a forecast of the state's general-purpose sales tax. Per the Build Nebraska Act, NDOT's State Highway Capital Improvement Fund receives a transfer of funds equivalent to 85 percent of 0.25 percentage points of the 5.5 percent state sales tax revenues accruing to the state's General Fund through SFY 2033.[8] The relevant factors in this forecast are population growth, real gross domestic product (GDP), inflation, and the percentage of final economic activity that is subject to the state sales tax.

3.3.1 'Population'

This tab contains annual U.S. Census estimates of Nebraska's population from 2000-2019.[9] In addition, it contains five-year population projections from 2020 to 2050 published by UNO.[10] Annual growth rates from 2020 to 2050 are interpolated from the five-year UNO figures.

3.3.2 'Inflation'

This tab contains monthly Consumer Price Index for All Urban Consumers (CPI-U) data for the Midwest Region as published by the U.S. Bureau of Labor Statistics.[11] These data populate a table of annual growth in the CPI-U through 2019. The model user can specify annual inflation assumptions for 2020 and all following years; its baseline assumption is 2.4 percent, which is the median annual growth rate in the Midwest Region CPI-U from 1990 through 2019.

3.3.3 'Real GDP'

This tab contains the inflation-adjusted value of Nebraska's GDP as reported by the Federal Reserve Bank of St. Louis.[12] Using the data in the 'Population' tab, the model calculates real GDP per capita, and the historical annual growth rate in real GDP per capita. For years 2020 and beyond, real GDP per capita is assumed to grow by 1.6 percent, which is the median annual increase in estimated real GDP per capita in Nebraska from 2000-2019.

3.3.4 'Nominal GDP'

This tab takes the annual growth assumptions in the 'Population', 'Inflation', and 'Real GDP' tabs to calculate corresponding growth in the current-year dollar value of all final goods and services sold in Nebraska. By definition, a percentage change in nominal GDP is a function of percentage changes in real GDP per capita, population, and inflation as follows:

$$\%\ Change\ in\ Nominal\ GDP =$$

$$\big((1 + \%\ change\ in\ real\ GDP\ per\ capita) * (1 + \%\ change\ in\ population) * (1 + \%\ inflation)\big) - 1.$$

Nominal GDP forecasts are calibrated to historical estimates provided by the Federal Reserve Bank of St. Louis.[13]

3.3.5 'Net Taxable Sales'

This tab calculates the annual historical fraction of Nebraska's final economic activity that is subject to the state sales tax using historical data on net taxable sales, and nominal GDP data adjusted for Nebraska's July-June fiscal year and excluding motor vehicle sales.

This figure has decreased from 35.2 percent in 2004 to 29.6 percent in 2019, reflecting a broad shift in GDP from goods to services, and that whereas most sales of final goods are subject to sales tax, most sales of services are not. The forecast leaves the 2019 figure of 29.6 percent in place as the assumption for future years, but the model user can adjust this assumption. This assumption, combined with the projection in growth of nominal GDP, yields the forecast of net taxable sales.

3.3.6 'State Sales Tax'

This tab generates an annual forecast of state sales tax revenues accruing to NDOT through the State Highway Capital Improvement Fund using historical information on sales tax rates, net taxable sales, and their allocation to Nebraska's General Fund, cash funds, and trust funds, and using the forecast of net taxable sales.[14]

In this tab, the model user can adjust the assumed sales tax rate, the allocation of its proceeds to the General Funds and other funds, and the parameters around the fraction of General Fund sales tax proceeds that are transferred to NDOT through the State Highway Capital Improvement Fund.

3.4 Projections of Vehicle Fleet Characteristics and Fuel Consumption

The three white tabs present two forecasts of taxable motor fuel use; one corresponding to the U.S. Energy Information Administration (EIA)'s national forecast of fleet energy use, and one corresponding to a model of the dynamics of Nebraska's vehicle fleet, incorporating explicit forecasts of fuel economy and the adoption of electric vehicles over time. The model user can toggle which of these forecasts controls the model's forecast of motor fuel tax revenue, or the user can specify his or her own annual forecast.

3.4.1 'EIA Fleet Energy Use Forecast'

This tab contains the forecasts of annual change in the national consumption of gasoline and diesel by personal and commercial vehicles through 2050.[15] This forecast incorporates EIA assumptions around changes in vehicle miles traveled (VMT), average fuel economy, and fuel types, but is not disaggregated into component forecasts for these factors. In addition, the

EIA forecast is national and the agency does not publish an equivalent regional or state-level forecast.

3.4.2 'Fleet Dynamics'

This tab contains a forecast of the annual change in taxable gallons of motor fuel consumed in Nebraska. It incorporates assumptions of annual growth in average fleet fuel economy, VMT, the number of vehicle registrations, and the adoption of electric vehicles over time. The forecast is calibrated to 2018 federal data on private and commercial motor fuel use, VMT, and industry data on the average age of passenger vehicles. Many of these parameters can be changed by the model user to specify an alternative to the baseline forecast.

3.4.3 'Fuel Tax Dynamics'

This tab governs which forecast of percentage change in fuel consumption drives the model's forecast of motor fuel tax revenue to NDOT. Using the two cells highlighted in yellow (one each for gasoline and diesel), the model user can specify either the 'EIA Fleet Energy Use Forecast', the 'Fleet Dynamics' forecast, or one of up to three alternate user-defined forecasts each for gasoline and diesel.

3.5 Forecasts of Transportation-related Revenue Sources

The six orange tabs are forecasts of revenues generated by taxes and fees paid by people and companies to own and operate vehicles using Nebraska's transportation system.

3.5.1 'State Fuel Taxes'

This tab uses the fuel consumption forecast specified in the 'Fuel Tax Dynamics' tab, the motor fuel tax rates under current law[16], and the statutory distribution of receipts to various funds pursuant to state law.[1]

The model user can specify alternative tax rates for each of Nebraska's fixed, incremental, variable, and wholesale fuel tax rates, and can also alter the formula distribution of proceeds from each of those taxes to the Highway Cash Fund, the Highway Allocation Fund, and (in the case of the Incremental Tax) the Transportation Infrastructure Bank.

This tab also incorporates assumptions on off-the-top appropriations to the Tax Enforcement Fund and includes a forecast of NDOT's share of IFTA revenues.

3.5.2 'Motor Vehicle Sales Taxes'

This tab contains historical data on net taxable motor vehicle sales as reported by the NDR, and models the statutory distribution of proceeds from the 5.5 percent tax on vehicle sales and leases to the Highway Cash Fund, the Highway Allocation Fund, the Grade Crossing Fund, and the State-Aid Bridge Fund.[17]

The baseline forecast of growth in net taxable motor vehicle sales is 3.1 percent annually, which corresponds to the compound annual average growth rate in taxable sales from 1999 through 2019. The model user can specify alternative annual growth rates, alternative tax rates, alternative transfers to the Grade Crossing Fund and the State-Aid Bridge Fund, and alternative formulas for the allocation of remaining revenues to the Highway Cash Fund and the Highway Allocation Fund.

3.5.3 'Registrations'

This tab includes historical data on annual revenues to NDOT from vehicle registrations, new plate fees, surcharges to the Recreation Road Fund, and prorated commercial vehicle registrations. Forecasts of future revenues are calibrated to SFY 2019 actual revenues.

The baseline assumption of the growth in registrations and new plate fees is that the number of vehicles per capita in Nebraska remains constant, and that the rate at which they are replaced is also constant. This means that assumed annual growth is tied directly to annual population growth assumptions underlying the state sales tax forecast. From 2020 to 2030, this annual growth assumption is 0.55 percent. From 2030 onwards, it is 0.43 percent. Annual new plate fee revenues in the model have a cyclical component reflecting the six-year production lifecycle of Nebraska license plates.

The model user can specify alternative annual growth rates in gross registrations, new plate fees, transfers to the NDMV Cash Fund for license plate manufacture, and the statutory formula allocations of receipts to the Highway Cash Fund and the Highway Allocation Fund.

3.5.4 'Grade Crossing'

This tab contains a projection of revenues into the Grade Crossing Fund. It includes transfers from the State Highway Trust Fund specified in law and a projection of Railroad Excise tax revenues. This forecast tool does not include a detailed forecast of train miles and public grade crossings; as annual revenues have generally been between $2.5 million and $3.0 million per year the baseline forecast is set at $2.5 million per year. The model user can change this revenue assumption.

3.5.5 'Miscellaneous'

The forecast tool projects miscellaneous direct revenue to the NDOT Roads Operations Fund based on trends in actual monthly revenues in the 'Data Base' tab.

Annual revenue from sales of supplies and materials, sales of fixed assets, overload fines, and other miscellaneous revenue do not show an obvious growth trend. Therefore, future revenues from these sources are assumed to remain constant at their SFY 2019 levels.

Permits for oversize and/or overweight vehicles are assumed to grow by 2.5 percent per year, which is the compound annual average growth rate in this revenue source from 2012 through 2019.

3.5.6 'Interest Earnings'

This tab contains historical information on interest earnings accruing to the State Highway Trust Fund, the Roads Operations Cash Fund, the Grade Crossing Fund, the Recreation Road Fund, the State-Aid Bridge Fund, the State Highway Capital Improvement Fund, and the Transportation Infrastructure Bank.

Rather than projecting average cash balances for each of these funds and the annual return on the Nebraska Operating Investment Pool, the model assumes interest earnings will grow from SFY 2019 actuals by the proportionate change in revenues to those funds above the SFY 2019 baseline.

3.6 Summary Tables

The four green tabs contain summary tables for all revenue sources in the forecast spreadsheet tool.

3.6.1 'Current Dollars'

This tab contains all revenue forecasts by state fiscal years in current dollars. Each row in this tab corresponds to a unique revenue stream to an agency through a particular fund. This tab also contains a field specifying which spreadsheet tab contains the forecast calculations for that revenue stream.

3.6.2 'Constant 2019 Dollars'

This tab contains the same forecasts as in the 'Current Dollars' tab; however, the figures are adjusted for annual discount factors to calculate the value of revenue streams in constant 2019 dollars. Model users can specify the annual discount factors, which are set in the baseline forecast to 2.0 percent.

3.6.3 'By Fund'

This tab contains Pivot Tables presenting the information in the 'Current Dollars' and 'Constant 2019 Dollars' tabs aggregated by fund. The PivotTables are filtered to show only NDOT revenue streams. If the model user changes a parameter in the model, he or she must refresh the Pivot Tables by right-clicking on the Pivot Table and selecting "Refresh".

3.6.4 'By Funding Source'

This tab contains Pivot Tables presenting the information in the 'Current Dollars' and 'Constant 2019 Dollars' tabs aggregated by funding source. The PivotTables are filtered to show only NDOT revenue streams. As with the 'By Fund' tab, if the model user changes a parameter in the model, he or she must refresh the Pivot Tables by right-clicking on the Pivot Table and selecting "Refresh".

4 The Baseline Forecast

The result of the baseline NDOT revenue forecast shows $16.5 billion in current-dollar revenue to NDOT for the 2020-2040 planning period. Of this, $11.0 billion is state funding and $5.5 billion is highway and transit apportionments from the federal government. Of the $11.0 billion in state funds, $9.7 billion is generated by the ownership or operation of a vehicle on Nebraska's transportation system, while $1.3 billion is projected from current-law transfers of General Fund sales tax revenue to NDOT through the State Highway Capital Improvement Fund.

Table 4-1 shows the results of the baseline forecast organized by funding source.

Table 4-1: NDOT STP 2040 Revenue By Funding Source (millions of current dollars)

Funding Source	2040 Total
Alternative Fuel Fee	$64.2
Excess Limit	$80.6
Federal Fuel, Sales, and Tire Taxes	$5,522.6
IFTA	$8.8
Interest Earnings	$108.6
Motor Vehicle Sales Tax	$3,381.1
Miscellaneous Other	$34.9
Overload Fines	$14.6
Prorated Registrations	$299.6
Railroad Excise Tax	$50.0
Sale of Fixed Assets	$25.0
Sale of Supplies & Materials	$29.1
State Fuel Tax - Fixed	$1,906.7
State Fuel Tax - Incremental	$508.4
State Fuel Tax - Variable	$717.9
State Fuel Tax - Wholesale	$1,708.7
State General Purpose Funds	$1,327.2
Vehicle Registrations	$755.0
Total	**$16,543.0**

Table 4-2 shows the results of the baseline forecast organized by fund.

Table 4-2: NDOT STP 2040 Revenue By Fund (millions of current dollars)

Fund	2040 Total
FHWA Funding	$5,238.8
FTA Funding	$283.7
Grade Crossing Fund	$60.2
Highway Cash Fund	$8,910.3
Recreation Road Fund	$83.5
Road Operations Cash Fund	$243.4
State Highway Capital Improvement Fund	$1,330.2
Transportation Infrastructure Bank	$392.7
Total	**$16,543.0**

[1] Nebraska Department of Transportation (2020). *Nebraska Transportation Financing*. Retrieved from https://dot.nebraska.gov/media/2815/transportation-finance-flowchart.pdf.
[2] Federal Highway Administration (2018). *The Highway Trust Fund*. Retrieved from https://www.fhwa.dot.gov/policy/olsp/fundingfederalaid/07.cfm.
[3] Eno Center for Transportation (2019). *How State Highway Funding Totals Are Calculated Under the FAST Act*. Retrieved from https://www.enotrans.org/article/how-state-highway-funding-totals-are-calculated-under-the-fast-act/.
[4] Federal Highway Administration (2020). *Distribution of Federal-Aid Highway Program Obligation Limitation for Fiscal Year (FY) 2020.* .Retrieved from https://www.fhwa.dot.gov/legsregs/directives/notices/n4520264/.
[5] Federal Transit Administration (2020). *Fiscal Year 2020 Apportionment Tables (Full Year). Retrieved* from https://www.transit.dot.gov/funding/apportionments/fiscal-year-2020-apportionment-tables-full-year.
[6] Nebraska Department of Revenue (n.d.). *Total Vehicles Registered in 2018*. Retrieved from https://dmv.nebraska.gov/sites/dmv.nebraska.gov/files/doc/data/reg/vehicles/Total-Vehicles-Registered-2018.xlsx.
[7] Federal Highway Administration (2020). *Summary of Apportionments Authorized for Fiscal year (FY) 2020*. Retrieved from https://www.fhwa.dot.gov/fastact/comptables/table11p1.cfm.
[8] Nebraska Department of Transportation (n.d.). *Build Nebraska Act.* https://dot.nebraska.gov/projects/bna/.

[9] U.S. Census Bureau (2020). *State Population Totals and Components of Change: 2010-2019*. Retrieved from https://www.census.gov/data/tables/time-series/demo/popest/2010s-state-total.html.
[10] University of Nebraska Omaha (2015). *Nebraska County Population Projections: 2010 to 2050*. Retrieved from https://www.unomaha.edu/college-of-public-affairs-and-community-service/center-for-public-affairs-research/documents/nebraska-county-population-projections-2010-to-2050.pdf.
[11] U.S. Bureau of Labor Statistics (2020). *Consumer Price Index - Midwest*. Retrieved from https://www.bls.gov/regions/midwest/data/consumerpriceindexhistorical_midwest_table.pdf
[12] Federal Reserve Bank of St. Louis (2020). *Real Total Gross Domestic Product for Nebraska*. Retrieved from https://fred.stlouisfed.org/series/NERGSP.
[13] Federal Reserve Bank of St. Louis (2020). Total Gross Domestic Product for Nebraska. Retrieved from https://fred.stlouisfed.org/series/NENGSP.
[14] Nebraska Department of Administrative Services (2019). *Annual Budgetary Report*. Retrieved from https://das.nebraska.gov/accounting/financial_reports/annual_budget_reports.html.
[15] U.S. Energy Information Administration (2020). *Annual Energy Outlook 2020 - Table 42: Transportation Fleet Car and Truck Fuel Consumption by Type and Technology.* Retrieved from https://www.eia.gov/outlooks/aeo/data/browser/#/?id=53-AEO2020.
[16] Nebraska Department of Revenue (2019). *Motor Fuels Tax Rate Set for January 1 through June 30, 2020*. Retrieved from https://revenue.nebraska.gov/sites/revenue.nebraska.gov/files/doc/news-release/fuels/Motor_Fuels_Tax_Rate_12-19-2019.pdf.
[17] Nebraska Department of Revenue (2020). *Annual Motor Vehicle Sales Tax Collections.* Retrieved from https://revenue.nebraska.gov/research/statistics/sales-tax-data.