

**Tipton Community School Corporation**



**Transportation  
Review & Analysis**

**Robert W. Schultz, Ph.D.**

**January, 2022**



## Table of Contents

Acknowledgements.....	i
Overview / Background Financial Understanding .....	2
Transportation Cost Review.....	5
Conclusions, Points to Consider, and Personal Observations.....	9

### TABLES

Table 1: Education Fund Balances as Percent of Expenditures .....	3
Table 2: Combined Education + Operations + Rainy Day.....	3
Table 3: Without Rainy Day.....	4
Table 4: TCSC Contracted Routes History .....	6
Table 5: Cost Calculation for Corporation Owned Busses/Routes.....	7
Table 6: Cost of Contracted Route Compared to Corporation Owned Route .....	7
Table 7: Scenario 1 - Convert 7 Routes and Eliminate 2 Routes .....	8
Table 8: Scenario 2 - Convert 6 Routes and Eliminate 3 Routes .....	8
Table 9: Scenario 3 - Convert 5 Routes and Eliminate 4 Routes .....	8

## **Acknowledgements**

I have been blessed throughout my life and career to be surrounded by wise, caring, dedicated people. My most prized partner is my wife. She is my encourager, supporter, editor, and sounding board. Her love for children led her to create and sustain the My Closet program at TCSC, a miraculous program that earned her the Sagamore of the Wabash honor – and is totally funded by the community and people across the state. Our daughter is an Operations Manager at a new Crowne Plaza Hotel near Madison Square Garden in Manhattan. Our son works for GXO Worldwide Logistics near Lebanon, Indiana, and is returning to school to study business. Together they are a team that blesses my life every day.

The data and information in this study was compiled with the help of many outstanding leaders at TCSC. Dr. Ryan Glaze, Superintendent, provided the leadership that initiated this study, and Amy Phillips, Tonja Carter, Dawn Benefiel and Shayne Clark supplied data and support needed to complete it. Wisdom and input from Eric Johnson and Mark Webster were an essential component.

It has been a privilege to prepare this study. I give honor and praise to the Master Teacher who has guided me throughout my life.

## **Overview / Background Financial Understanding**

### ***Change in School Corporation Budget Structure***

Prior to 2019 school corporation budgets were structured into 5 primary funds: General Fund, Capital Projects Fund, Transportation Fund, Bus Replacement Fund, and Debt Service Fund. Each fund had distinct expenditure guidelines and transferring revenue between funds was strictly controlled. (In fact, those funds were often referred to as “silos.”) All expenses related to transportation except the actual purchase of busses – from driver salaries/benefits to fuel and repairs – were controlled in the Transportation Fund. The purchase of busses was controlled in a separate Bus Replacement Fund.

State legislation passed in 2017 (HEA 1009-2017) changed the basic structure of school budgeting. That legislation was authored by the representative of the 32<sup>nd</sup> district, which includes Tipton County, who is Tony Cook, former superintendent of Hamilton Heights School Corporation. The legislation became effective on January 1, 2019.

The 5 funds were condensed into 3: Education Fund, Operations Fund, and Debt Service Fund. The new Operations Fund combined the former Capital Projects, Transportation, and Bus Replacement Funds – and also absorbed some expenses from the former General Fund. An advantage of the new structure is funds can now be transferred between the Education and Operations Funds by a Board resolution (no more silos). A disadvantage, and even a danger, is the former allocations for transportation and bus replacement in separate funds can easily be lost in the much larger Operations Fund.

Important and critical note: The Education and Operations Funds are more closely and integrally linked than ever before. The cash flow and cash balances in those two funds must be considered and scrutinized together to keep a corporation budget in sound financial shape.

It should also be noted Tipton maintains a Rainy Day Fund, which has been created by transferring money into it from other funds. An appropriate Rainy Day Fund is, in this author’s opinion, critical as an emergency safeguard for unforeseen budget challenges.

### ***Overall Financial Analysis***

The Tipton Community School Corporation currently finds itself in a pattern of having annual expenditures that exceed revenue. Fiscal Indicators, updated through the end of 2020, have been released for all Indiana school corporations. A report on those indicators is given annually to every school board in Indiana at the first meeting in January. A key table, again in the opinion of this author, details the end of the year cash balance as a percentage of the year’s expenditures. State budgeting officials recommend one month’s cash balance – 8.33% -- as a minimum. A 20% cash balance is considered a prudent goal. The following 2 tables detail the end of year cash balances for the Education Fund by itself and the combined Education + Operations + Rainy Day Funds at TCSC:

Table 1: Education Fund (known as General Fund prior to 2019)

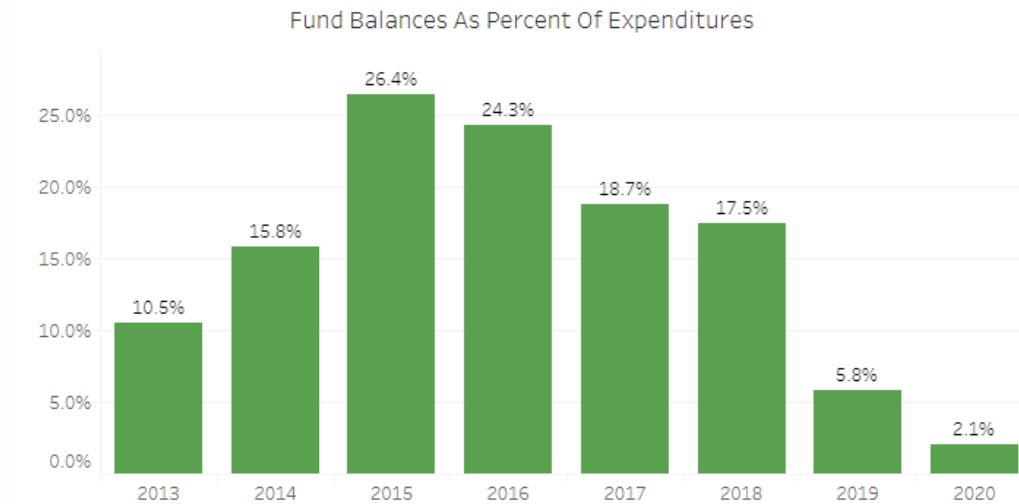
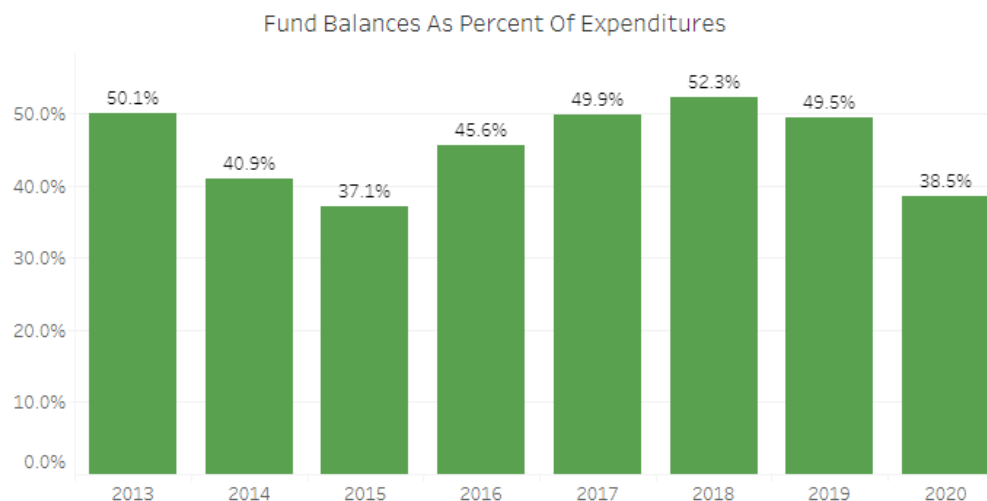
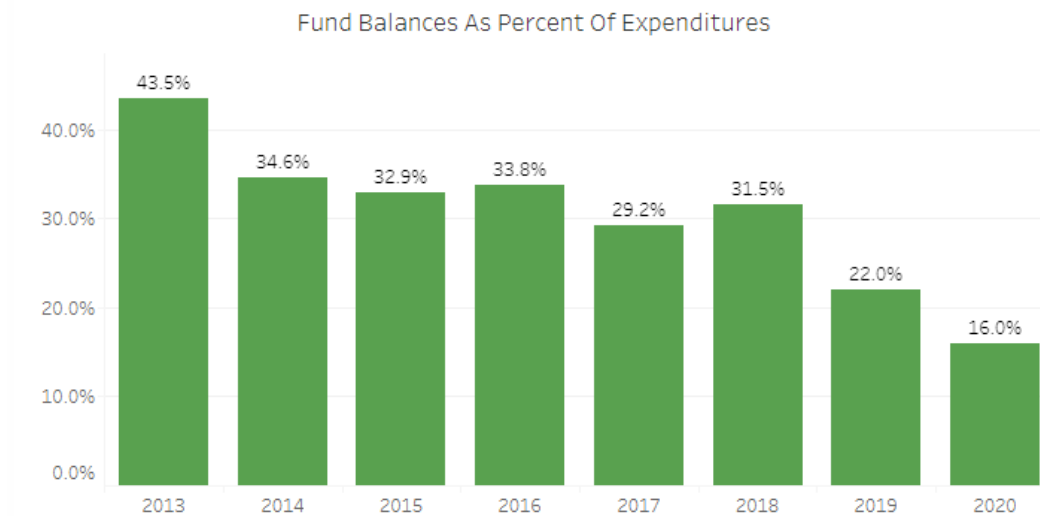


Table 2: Combined Education + Operations + Rainy Day Funds



The first table demonstrates a year end cash balance in the Education Fund below the 20% target since 2017 and below the state recommended 8.33% minimum for both 2019 and 2020. Although that table by itself is cause for concern, the second table demonstrates a more healthy cash balance when the Operations Fund and the Rainy Day Fund are included. A 38.5% cash balance at the end of 2020 for the 3 funds combined is certainly adequate, but the decline since 2018 must be monitored. A fiscal question that presents itself is, “How much does that 38.5% balance rely on Rainy Day Funds?” The following table demonstrates the end of year cash balances when the Rainy Day Fund is omitted:

Table 3: Without Rainy Day Fund



The 16.0% cash balance at the end of 2020 represents nearly 2 months of expenditures, which is adequate (although declining since 2018). When compared to the previous table, however, it is apparent a substantial reliance on the Rainy Day Fund is used to maintain a healthy cash balance.

***How is this Relevant (and Why is it Important)?***

As noted above, the Education and Operations, since 2019, are intricately intertwined. They must be monitored separately – and they must also be monitored together. To create a solid financial foundation for TCSC expenditures must be reduced. Ways to increase revenue can also be examined, but are limited in scope and viability. By reducing transportation expenditures, which is the focus of this analysis, the overall financial health of the school corporation can be enhanced.

## Transportation Cost Review

### ***Background***

School corporations may provide transportation services, as detailed in Indiana Code, in 3 primary ways (which can be combined):

- By owning school busses and hiring drivers
- By contracting with independent owner/operators who own their own bus and provide services as detailed in a contract
- By contracting with a company that owns and operates multiple busses for the school corporation (known as fleet services)

TCSC uses a combination of the first two methods. TCSC has 9 full-time routes operated by the corporation (busses owned by the corporation with drivers hired by the corporation), 5 for regular routes and 4 for special education routes. TCSC also has 9 routes that are contracted to individual owner/operators.

NOTE: For the purpose of this study special education routes will not be examined. They vary greatly from year to year – and often change during the school year. Special education routes are implemented for specific student needs as determined by a legal case conference for each student. Special education routes can involve transportation to another district for a specialized program, to the blind and/or deaf school in Indianapolis, to a TCSC school, or another special arrangement necessitated by student-specific needs.

### ***Contracted Route History and Cost***

The table on the next page shows contracted route history since 1997-98. Contracts are generally awarded every 4 years to owner/operators who respond to an advertised bid request for services. The years highlighted in blue indicate years for which new bids have been advertised. Drivers successful in being awarded a contract maintain that route until the next bidding opportunity. The data highlighted in gold indicates years when the total number of contracted routes was reduced. The number of routes was reduced (1) in response to declining student enrollment, creating the need for a smaller number of busses; or (2) (less common) a desire to convert a contracted route to a corporation route. It is anticipated a reduction in the number of routes will reduce expenditures. In 2005-06 the number of routes was reduced by 3, creating an annual savings of approximately \$120,000. Similar reductions in the number of routes with consequent savings were made in 2009-10, 2012-13, and 2019-20. Although the number of routes was reduced by 1 in 2013-14, the annual cost actually increased by nearly \$70,000. 2013-14 was a bidding year, and substantially higher bids were awarded. The number of routes was also reduced by 1 for 2017-18, but the annual cost increased. (Note: Route costs may vary from year to year based on route changes.)



Table 4: TCSC Contracted Routes History

School Year	# of Contracted Routes	Minimum Daily	Maximum Daily	Annual Cost	Change in Annual Cost
97 98	17	98.04	150.00	422,415.00	
98 99	17	98.04	150.00	422,415.00	0.00
99 00	17	102.67	156.09	441,598.50	19,183.50
00 01	17	102.67	159.87	441,598.50	0.00
01 02	17	130.00	154.50	447,012.30	5,413.80
02 03	17	130.00	160.14	457,472.40	10,460.10
03 04	17	135.00	164.62	470,612.10	13,139.70
04 05	17	135.00	169.33	479,868.90	9,256.80
05 06	14	130.00	152.75	360,261.30	(119,607.60)
06 07	14	130.00	153.75	363,183.45	2,922.15
07 08	14	135.00	158.76	373,826.25	10,642.80
08 09	14	135.00	159.69	377,025.60	3,199.35
09 10	13	130.00	163.99	348,828.90	(28,196.70)
10 11	13	130.00	165.59	348,778.50	(50.40)
11 12	13	130.00	165.59	354,805.50	6,027.00
12 13	12	135.00	165.59	334,450.20	(20,355.30)
13 14	11	167.75	245.00	402,729.60	68,279.40
14 15	11	167.75	245.00	406,343.70	3,614.10
15 16	11	167.75	245.00	407,811.60	1,467.90
16 17	11	167.75	245.00	409,132.50	1,320.90
17 18	10	196.00	247.00	413,307.30	4,174.80
18 19	10	196.00	247.00	413,250.60	(56.70)
19 20	9	207.80	268.00	390,000.66	(23,249.94)
20 21	9	207.80	268.00	394,704.70	0.00

	New Bid Year
	Reduced Number of Routes

### ***Cost of Corporation Owned Routes***

The following table shows the budgeted cost to the corporation of owning a bus and hiring a driver:

Table 5

<b>Annual Cost Calculation for Corporation Owned Bus</b>	
Bus Ownership Cost per Year <sup>1</sup>	6,927
Fuel Cost per Year <sup>2</sup>	2,329
Diesel Exhaust Fluid Cost per Year <sup>3</sup>	49
Oil Change Cost per Year <sup>4</sup>	483
Tire Replacement Cost per Year <sup>5</sup>	173
Insurance on Bus Cost per Year	1,071
Misc. Maintenance Budget (per bus)	2,000
<b>Total Cost of Bus Ownership Per Year</b>	<b>13,032</b>
<b>Average Salary of 3 Highest Paid Corporation Drivers (non Spec. Ed)</b>	<b>19,741</b>
<b>TOTAL COST OF CORP-OWNED BUS + DRIVER PER YEAR</b>	<b>32,773</b>

#### Calculation Guideline

- <sup>1</sup> 78 passenger bus @ \$103,912 / useful life of 15 years
- <sup>2</sup> 46 miles per day (rural route) @ 8.0 miles per gallon @ \$2.25 per gallon X 180 days per year
- <sup>3</sup> \$1.69 per gallon for every 36 gallons of fuel (28.8 gallons per year based on 8,280 miles driven)
- <sup>4</sup> \$350 per oil change every 6,000 miles (1.4 changes per year based on 8,280 miles driven)
- <sup>5</sup> \$260 per tire X 6 tires – once every 9 years

Table 6: ***Cost of Contracted Route Compared to Corporation-Owned Route***

\$43,856	Annual average cost of contracted route (\$394,705 / 9)
\$32,773	Calculated annual cost of a corporation-owned bus + a corporation-hired driver
<b>\$11,083</b>	<b>Annual savings of corporation-owned route over contracted route</b>

### ***Possible Scenarios to Reduce Expenditures***

With input from Dr. Glaze, Shayne Clark, and Eric Johnson, a significant reduction in transportation expenditures can be realized by a combination of converting contract routes to corporation routes and by reducing the total number of routes.

Table 7

<u>Scenario 1: Convert 7 contract routes and eliminate 2 routes</u>	
\$ 77,578	Savings from converting 7 routes (\$11,083 per route)
87,712	Savings from eliminating 2 contracted routes (\$43,856 per route)
<b>\$ 165,291</b>	<b>Potential Annual Savings</b>

Table 8

<u>Scenario 2: Convert 6 contract routes and eliminate 3 routes</u>	
\$ 66,496	Savings from converting 6 routes (\$11,083 per route)
131,568	Savings from eliminating 3 contracted routes (\$43,856 per route)
<b>\$ 198,064</b>	<b>Potential Annual Savings</b>

Table 9

<u>Scenario 3: Convert 5 contract routes and eliminate 4 routes</u>	
\$ 55,413	Savings from converting 5 routes (\$11,083 per route)
175,424	Savings from eliminating 4 contracted routes (\$43,856 per route)
<b>\$ 230,838</b>	<b>Potential Annual Savings</b>

These Scenarios can be structured in numerous ways. Each Scenario above is based on completely (and immediately) eliminating contracted routes. Primary savings comes from eliminating routes. 2, 3, or 4 routes could be eliminated immediately as detailed above, but the conversion of contracted routes to corporation routes could be phased in over 2 bidding cycles. Some possible variations:

- In Scenario 1 (Table 7) eliminate 2 contract routes, convert 3 contract routes, and delay conversion of 4 remaining contract routes until next bidding cycle (4 years). Annual savings reduced to \$120,961 for 4 years.
- In Scenario 2 (Table 8) eliminate 3 contract routes, convert 3 contract routes, and delay conversion of 3 remaining contract routes until next bidding cycle. Annual savings reduced to \$164,817 for 4 years.
- In Scenario 3 (Table 9) eliminate 4 contract routes, convert 2 contract routes, and delay conversion of 3 remaining contract routes until next bidding cycle. Annual savings reduced to \$197,590 for 4 years.

## Conclusions, Points to Consider, and Personal Observations

The points below are numbered to facilitate future review. They represent facts about the corporation as well as pros and cons (or at least considerations) about converting contract routes to corporation routes and also reducing the total number of routes.

1. It is essential for TCSC to reduce expenditures. Because the Education Fund and the Operations Fund are integrally intertwined, as explained in section 1, a reduction in expenditures in either fund has a positive impact on the overall financial health of the school corporation. This study details ways to reduce expenditures in transportation, but that is only a small piece of the overall corporation budget. Reductions in other areas must also be included in long range financial planning.
  - Revenue for the Education Fund is almost entirely based on student enrollment. In a Financial Analysis prepared by this author for TCSC in October, 2020, it was noted student enrollment for TCSC had declined for 6 straight years from 2014-15 through 2020-21. The official fall enrollment for TCSC declined again for 2021-22. Over the past 7 years enrollment has declined a total of 342 students, resulting in a reduction of potential revenue over those 7 years of \$2,135,505. Although the student enrollment has declined, the number of full time teachers has actually increased – by 4 teachers – over that same time period.
2. Costs of everything increase, and escalating costs must be included in a comprehensive budget plan.
  - Salaries and benefits are the largest expenditures for all school corporations.
    - Salaries and benefits comprise approximately 94% of the TCSC Education Fund expenditures
    - Salaries and benefits comprise approximately 62% of the TCSC Operations Fund expenditures. (Many expenditures in the Operations Fund are fixed and more difficult to reduce, including property insurance, utilities, cleaning and maintenance supplies, etc.)
3. The Rainy Day Fund must be utilized with extreme caution in cases of unforeseen expenses, unforeseen reductions in revenue, and other emergency type situations.
  - A conscious effort was made to increase the Rainy Day Fund from 2015 through 2019. \$3,400,000 was transferred into the Rainy Day Fund from a combination of the General Fund (2016 & 2017: \$1,250,000 total), the Transportation Fund (2015, 2016, & 2017: \$650,000 total), the Bus Replacement Fund (2015 & 2017: \$500,000 total), and the Operations Fund (2019: \$1,000,000).
  - \$1,200,000 total was transferred out of the Rainy Day Fund in 2020 and the first 6 months of 2021 to cover shortfalls in the Education Fund and large projects in the Operations Fund.
4. Annual savings in the Operations Fund can be realized by implementing one of the scenarios on page 8. Some important considerations:

- If the corporation increases the size of the fleet, where will the corporation get funding for new busses? The TCSC Transportation Report and Recommendations document shared with the TCSC School Board at an earlier date details several financing options, all of which are viable. Any type of leasing arrangement provides an outstanding opportunity to reduce/control initial outlay and establish a manageable financial obligation over the life of the lease. Tax Exempt Financing is a leasing-type option that also includes manageable annual payments.
- Can the current transportation mechanics (Eric Johnson and Mark Webster) manage servicing more (5-7) busses? They feel they can, but additional responsibilities for maintenance, mowing, etc. they now have would need to be considered for assignment to other personnel.
  - The \$2000 per bus per year budget for general maintenance is essential if busses are to be kept in efficient and safe operating condition for multiple years (15 is the target).
- There are national panels on bus driver shortage. If the corporation converts 5-7 routes to corporation routes can drivers be found? Current contract drivers may be willing to change to a corporation driver, but will they accept the salaries currently being paid? Increases in driver pay would consequently reduce annual savings. Additionally, how would the corporation help owner/operations liquidate their busses?
- What is the ideal size (capacity) for a bus? In short, there is no perfect number.
  - Listed capacity of busses is determined by multiplying the number of seats on a bus by 3, assuming 3 students can sit in a seat. For example, a 66 passenger bus has 22 seats. Because of varying student physical size and increased social distancing concerns, it is highly doubtful a 66 passenger bus can hold 66 students. A more realistic capacity number is to multiply the number of seats by 2, making a “66 passenger” bus have a practical capacity of 44 (22 seats X 2 students per seat).
  - Larger busses (78 or 84 passenger) provide more flexibility in transporting students both to school and to extracurricular events. This study used a 78 passenger bus, which matches the last bus purchased by TCSC, for calculations. A 78 passenger bus has 26 seats, equating to a realistic capacity of 52 students (2 per seat).
- If routes are eliminated will the remaining busses be overcrowded?
  - The 9 contracted routes average 20.8 students per bus (187 students/9 busses). All contracted busses are 66 passenger. From the information in the previous bullet point, there are 22 seats on each contracted bus. With an average ridership of 21, that equates to 1 student per seat. The contracted bus with the largest ridership has 25 students.
  - Eliminating 2 contract routes would increase the average ridership to 26.7 on the remaining 7 busses (187/7). If those 7 routes are all converted to

corporation routes – with 78 passenger busses – that would equate to 27 students for 26 seats.

- Eliminating 3 contracted routes would increase ridership to 31.2 students per bus ( $187/6$ ) – for 26 seats.
  - Eliminating 4 contracted routes would increase ridership to 37.4 students per bus ( $187/5$ ) – for 26 seats.
  - Because bus riders are predominantly elementary students, the numbers above can be reasonably accommodated.
  - Corporation busses have an average ridership of 34.4 students (with 26 seats). A blending of rural routes with town routes, as mentioned in the next bullet point, would help balance ridership on all busses.
- If routes are eliminated, how long will students have to ride a bus to get to school?
    - Most school corporations use a 1 hour maximum ride time (each direction). A maximum of 45 minutes is preferable to allow for weather and other delays. In restructuring routes ride time must be carefully considered and balanced with ridership numbers.
    - Currently, routes in the city of Tipton are significantly shorter and consume less time than routes into the rural areas of the district. Restructuring of routes could combine city pick-ups with rural pick-ups to balance route distance, ride time, and ridership numbers.

---

In conclusion, the Tipton community is blessed by caring, supportive citizens who are committed to the success of the schools. School staff, school board members, and community patrons have formed many strong partnerships throughout then 100+ years of the school corporation. School transportation is a vital and essential part of the school environment and operation. For many students their school day begins and ends with a bus ride, so it is essential for that ride to contribute to each child's success. The many wonderful extracurricular activities also could not exist without busses.

I have deeply appreciated the opportunity to complete this study, and am committed to helping TCSC in any way I can.

Blessings to all.

