Transportation Research Center Inc.

(A component unit of The Ohio State University)
Financial Statements
As of and for the Years Ended June 30, 2019 and 2018
and Report of Independent Auditors

OHIO AUDITOR OF STATE
KEITH FABER

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Board of Directors
Transportation Research Center Inc.
2040 Blankenship Hall
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We have reviewed the *Report of Independent Auditors* of the Transportation Research Center Inc., Franklin County, prepared by PricewaterhouseCoopers LLP, for the audit period July 1, 2018 through June 30, 2019. Based upon this review, we have accepted these reports in lieu of the audit required by Section 117.11, Revised Code. The Auditor of State did not audit the accompanying financial statements and, accordingly, we are unable to express, and do not express an opinion on them.

Our review was made in reference to the applicable sections of legislative criteria, as reflected by the Ohio Constitution, and the Revised Code, policies, procedures and guidelines of the Auditor of State, regulations and grant requirements. The Transportation Research Center Inc. is responsible for compliance with these laws and regulations.

Keith Faber

Keith Faber
Auditor of State
Columbus, Ohio

November 20, 2019

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Report of Independent Auditors

To the Board of Directors of
Transportation Research Center Inc.:

We have audited the accompanying financial statements of Transportation Research Center Inc. ("TRC"), a component unit of The Ohio State University, appearing on pages 10 to 32, which comprise the statements of net position as of June 30, 2019 and 2018, and the related statements of revenues, expenses, and other changes in net position and of cash flows for the years then ended, and the related notes to the financial statements, which collectively comprise TRC's basic financial statements.

Management's Responsibility for the Financial Statements

Management is responsible for the preparation and fair presentation of the financial statements in accordance with accounting principles generally accepted in the United States of America; this includes the design, implementation, and maintenance of internal control relevant to the preparation and fair presentation of financial statements that are free from material misstatement, whether due to fraud or error.

Auditors' Responsibility

Our responsibility is to express an opinion on the financial statements based on our audits. We conducted our audits in accordance with auditing standards generally accepted in the United States of America and the standards applicable to financial audits contained in *Government Auditing Standards*, issued by the Comptroller General of the United States. Those standards require that we plan and perform the audit to obtain reasonable assurance about whether the financial statements are free from material misstatement.

An audit involves performing procedures to obtain audit evidence about the amounts and disclosures in the financial statements. The procedures selected depend on our judgment, including the assessment of the risks of material misstatement of the financial statements, whether due to fraud or error. In making those risk assessments, we consider internal control relevant to the entity's preparation and fair presentation of the financial statements in order to design audit procedures that are appropriate in the circumstances, but not for the purpose of expressing an opinion on the effectiveness of the entity's internal control. Accordingly, we express no such opinion. An audit also includes evaluating the appropriateness of accounting policies used and the reasonableness of significant accounting estimates made by management, as well as evaluating the overall presentation of the financial statements. We believe that the audit evidence we have obtained is sufficient and appropriate to provide a basis for our audit opinion.

pwc

Opinion

In our opinion, the financial statements referred to above present fairly, in all material respects, the financial position of TRC as of June 30, 2019 and 2018, and the changes in financial position and cash flows for the years then ended in accordance with accounting principles generally accepted in the United States of America.

Other Matter

The accompanying management's discussion and analysis on pages 3 through 9 and the Required Supplementary Information on GASB 68 Pension Liabilities and GASB 75 OPEB Liability on page 33 are required by accounting principles generally accepted in the United States of America to supplement the basic financial statements. Such information, although not a part of the basic financial statements, is required by the Governmental Accounting Standards Board who considers it to be an essential part of financial reporting for placing the basic financial statements in an appropriate operational, economic, or historical context. We have applied certain limited procedures to the required supplementary information in accordance with auditing standards generally accepted in the United States of America, which consisted of inquiries of management about the methods of preparing the information and comparing the information for consistency with management's responses to our inquiries, the basic financial statements, and other knowledge we obtained during our audits of the basic financial statements. We do not express an opinion or provide any assurance on the information because the limited procedures do not provide us with sufficient evidence to express an opinion or provide any assurance.

Other Reporting Required by Government Auditing Standards

In accordance with *Government Auditing Standards*, we have also issued our report dated November 7, 2019 on our consideration of TRC's internal control over financial reporting and on our tests of its compliance with certain provisions of laws, regulations, contracts, and grant agreements and other matters for the year ended June 30, 2019. The purpose of that report is solely to describe the scope of our testing of internal control over financial reporting and compliance and the results of that testing, and not to provide an opinion on the effectiveness of the entity's internal control over financial reporting or on compliance. That report is an integral part of an audit performed in accordance with *Government Auditing Standards* in considering TRC's internal control over financial reporting and compliance.

PricewaterhouseCoopers LLP

November 7, 2019

This Management's Discussion and Analysis provides an overview of the financial position and activities of Transportation Research Center Inc. (TRC Inc.) for the fiscal year ended June 30, 2019, with comparative information for the fiscal years ended June 30, 2018 and June 30, 2017.

Introducing Transportation Research Center Inc.

TRC Inc. independently manages the Transportation Research Center, a transportation research and testing facility located on 4,500 acres near East Liberty, Ohio, and various other laboratories. TRC Inc. assists the needs of the mobility industry, government, and educational institutions worldwide by creating safer, improved products through vehicle research and testing services. Research and testing programs are designed to test for safety, energy, fuel economy, emissions, durability, and crash worthiness on passenger vehicles, trucks, buses, motorcycles, recreational vehicles and their associated components.

The Transportation Research Center facility was developed by the State of Ohio and began operations in 1974. In 1979, the State of Ohio entered into an agreement with The Ohio State University's College of Engineering to oversee the operations of the Transportation Research Center. In 1988, the State of Ohio sold the facility to Honda of America Manufacturing, Inc. (HAM) as an economic inducement to secure a second automobile manufacturing plant. After the sale, The Ohio State University created TRC Inc. TRC Inc. and Honda of America Manufacturing, Inc. entered into a management agreement that provided the foundation for TRC Inc. to manage the Transportation Research Center as a multi-user facility. The management agreement was renewed annually and was terminated on December 31, 2017 in conjunction with the execution of a new Master Lease Agreement (MLA) between TRC Inc. and HAM.

On December 21, 2017, TRC Inc. entered into a 15-year MLA with HAM to lease the Transportation Research Center including testing facilities and equipment. The MLA went into effect January 1, 2018. Prior to January 2018, facility use revenue received by TRC was paid to HAM, TRC Inc. performed maintenance and repair activities under HAM's direction and HAM compensated TRC Inc. for the maintenance and repair activities. This new agreement significantly changed the operational structure of the relationship. Under the MLA, TRC Inc. has regular reporting requirements to HAM, is responsible for all facility and equipment maintenance and repair, and retains the revenues associated with customer facility use. The agreement was executed with the understanding that both organizations would continue to work collaboratively to address any ambiguities relating to interpretation of the terms of the agreement, including the new reporting requirements. As of the end of TRC Inc.'s fiscal year, these discussions were continuing.

TRC Inc. is governed by a seven-member board chaired by the Dean of the College of Engineering at The Ohio State University. The Ex-Officio Directors on the TRC Inc. Board of Directors represent The Ohio State University and its interest within TRC Inc. The Ex-Officio Directors on the TRC Inc. Board of Directors are the persons who hold the following positions at The Ohio State University: the Senior Vice President for Research of the University; the Dean of the College of Engineering of the University; the Senior Vice President for Business and Finance and Chief Financial Officer of the University; and, the President & Chief Executive Officer of Transportation Research Center Inc., held by Mr. Brett A. Roubinek. TRC Inc. is a discretely presented component unit in the financial statements of The Ohio State University.

TRC Inc. is a tax-exempt organization as described in section 501(c) (3) and section 509(a) (3) of the Internal Revenue Code. TRC Inc.'s tax-exempt purpose is conducting and supporting humanistic, scientific and engineering research and development activities solely and exclusively to the conduct of, or providing assistance in connection with the conduct of, research in automotive, vehicular, and related forms of transportation, and for the development of improved highway facilities for vehicular traffic. TRC Inc. does perform work outside of this exempt purpose, and as a result, does pay unrelated business tax on that income.

Key Financial Highlights
Significant financial events during fiscal year 2019 were:

- Research and testing revenues decreased 15.6% to $39,124,543 driven by lower testing volume and the federal government shutdown in the winter of 2019.
- TRC's income from operations decreased by 41.6% from a net operating income of $1,882,935 in 2018 to net operating income of $1,099,050 in 2019, driven primarily by a 28.52% increase in depreciation to $891,971 in 2019 and an overall decrease in revenue.
- In late June 2018, construction began on a new SMARTCenter (Smart Mobility And Research Testing). In fiscal year 2019, grant revenue of $14,677,038 and additions to property, plant and equipment of $17,382,010 were recorded relative to this construction.
- General and administrative expense decreased 3.0%, to $21,335,612 from offsetting increases and decreases within several expense categories.
- Decreases in the fair value of investments held in the university's Long Term Investment Pool resulted in an unrealized capital loss of $140,525.
- Total net position increased $15,384,475, to $26,973,892 at June 30, 2019.

Financial Statement Overview
For a summary of TRC Inc.'s significant accounting policies, please see footnote number two attached to the financial statements.

Presented in the financial statements are the Statements of Net Position at June 30, 2019 and June 30, 2018; the Statements of Revenues, Expenses and Changes in Net Position for fiscal years ended June 30, 2019 and 2018; and the Statements of Cash Flows for fiscal years ended June 30, 2019 and 2018.

The Statements of Net Position reflect TRC Inc.'s assets, liabilities and net position. The Statements of Revenues, Expenses and Changes in Net Position reflect information showing how net position changed during the fiscal year. The Statements of Cash Flows reports changes in the cash and cash equivalent balances during the fiscal year.

Summary Statements of Net Position

The major components of the Statements of Net Position at June 30, 2019, June 30, 2018 and June 30, 2017 are reflected below:

	2019	2018	Changes	2017
Assets				
Current assets	$ 16,227,019	$ 16,500,386	(1.66%)	$ 14,661,890
Net property and equipment	31,609,628	13,184,500	139.75%	9,340,964
Deferred Outflows Related to Pension and OPEB	24,238	56,008	(56.72%)	155,105
Total assets and deferred outflows	$ 47,860,885	$ 29,740,894	60.93%	$ 24,157,959
Liabilities				
Current liabilities	$ 7,871,165	$ 5,734,714	37.25%	$ 7,766,794
Net Pension Liability	196,482	389,535	(49.56%)	382,408
Long term notes payable	12,805,789	11,975,268	6.94%	6,000,000
Total liabilities	20,873,436	18,099,517	15.33%	14,149,202
Deferred Inflows Related to Pension and OPEB	13,557	51,960	(73.91%)	9,587
Net Investment in Capital Assets	16,474,600	1,449,172	1036.83%	1,468,228
Unrestricted net position	10,499,292	10,140,245	3.54%	8,530,942
Total liabilities, deferred inflow and net position	$ 47,860,885	$ 29,740,894	60.93%	$ 24,157,959

Current Assets

Total current assets decreased $273,367, or 1.66%, to $16,227,019 at June 30, 2019.

Cash decreased by $1,629,847, or 34.1%, to $3,148,761 at June 30, 2019. The decrease in cash was due to ongoing construction of the SMARTCenter.

Trade accounts receivable increased $245,193, or 3.83%, to $6,651,685 at June 30, 2019. The increase in trade accounts receivable was due to increased volume at the conclusion of the fiscal year and an increase in the average days outstanding of accounts receivable at June 30, 2019 compared to June 30, 2018. On average, TRC receivables were outstanding for 62 days in fiscal year 2019, compared to 50 days in fiscal year 2018.

Construction of the SMARTCenter began in late June 2018. In fiscal year 2019, grant receivable relative to this construction was $1,708,368 at June 30, 2019.

Investments decreased by $140,525, or 3.4%, to $3,991,501 at June 30, 2019. The decrease resulted from a decrease in the fair market value of the underlying investments of TRC Inc.'s equity interest in the investment pool maintained and managed by The Ohio State University's Office of Investments.

TRC Inc. records the unrealized gain or loss on its equity interest in the university's investment pool each year.

The unrealized gain or loss in TRC's equity interest in the investment pool for fiscal years 2019, 2018 and 2017 are as follows:

		2019		**2018**		**2017**
Market value of endowment fund	$	3,991,501	$	4,132,026	$	4,008,118
Book value of endowment fund		3,841,787		3,841,787		3,841,787
Net unrealized gain	$	149,714	$	290,239	$	166,331
Unrealized (loss) gain - current period	$	(140,525)	$	123,908	$	338,434

Net Property and Equipment

Net property and equipment increased $18,425,128 to $31,609,628 at June 30, 2019.

During fiscal year 2019, the largest capital addition, at $17,382,010, was expended toward construction of the SMARTCenter. Additionally, $837,890 was spent on facility maintenance and upgrade projects including privacy fence upgrades, parking lot repavement and a snow plow.

The remaining book values of each of the individual remaining capital assets are less than $100,000 individually and generally are assets used to maintain and secure the 4,500-acre facility, assist in the driver training program, or are vehicles used for travel purposes. Most of these capital assets are fully depreciated.

Current Liabilities

Total current liabilities increased $2,136,451 to $7,871,165 at June 30, 2019. The significant net increase in current liabilities primarily reflects increases related to construction costs for the SMARTCenter.

Accounts payable increased $652,975 to $2,672,308 at June 30, 2019. The increase in accounts payable was due to invoices related to capital asset additions. The work on capital asset additions was performed in fiscal year 2019 but not paid until fiscal year 2020.

The current portion of long term debt decreased $110,173 to $1,334,770 at June 30, 2019. This represents the principal amount reductions in fiscal year 2019 on loans from the University and JobsOhio.

Noncurrent Liabilities

GASB Statement No.68*, Accounting and Financial Reporting for Pensions*, requires employers participating in cost-sharing multi-employer retirement plans to recognize a share of the retirement plans' unfunded pension liabilities. During FY2019, TRC Inc. implemented a related accounting standard, GASB Statement No. 75, which requires employers participating in other post-employment benefit (OPEB) plans to recognize liabilities for plans whose actuarial liabilities exceed the plan's net assets. OPEB benefits consist primarily of post-retirement healthcare. The net pension liability recognized by TRC decreased $100,301, to $136,118 at June 30, 2019. The net OPEB liability at June 30, 2019 was $60,364. Total pension and OPEB expense recognized during 2019 was $196,482.

Long term notes payable increased by $830,521 to $12,805,789 at June 30, 2019. The increase relates to loans provided by the University of $2,165,290 which were used towards construction of the SMARTCenter. The total amount of long term debt provided was offset by payments made on principal as well as reclassifications from long term to short term debt.

Summary Statements of Revenues, Expenses and Other Changes in Net Position
The major components of the Statements of Revenue, Expenses and Changes in Net Position for fiscal years ended June 30, 2019, 2018 and 2017 are reflected below:

	2019	2018	Changes	2017
Operating revenues	$ 39,124,543	$ 48,240,388	(18.90%)	$ 45,514,761
Operating expenses	38,025,493	46,357,453	(17.97%)	46,222,716
Operating income	1,099,050	1,882,935	(41.63%)	(707,955)
Net nonoperating (expense) income	$ (251,088)	(274,181)	8.42%	109,548
Net change in value of equity interest in investment pool	(140,525)	123,908	(213.41%)	338,434
Excess revenue over expenses	707,437	1,732,662	-59.2%	(259,973)
Capital Grant	14,677,038	-	0.00%	-
Change in net position	15,384,475	1,732,662	787.9%	(259,973)
Beginning net position	11,589,417	9,999,170	15.90%	10,259,143
Cumulative effect of change in accounting principle	-	(142,415)	(100.00%)	-
Ending net position	$ 26,973,892	$ 11,589,417	132.75%	$ 9,999,170

Operating Revenues
The single source of revenue that TRC Inc. earned during fiscal year 2019 was research and testing agreement revenue. In fiscal year 2018 TRC earned owner's maintenance and repair revenue through December 31, 2017.

Research and testing agreement revenue is revenue TRC Inc. earns from its customers for use of the transportation research and testing facility and for conducting durability, dynamic, emissions, impact and sled research and testing. It also includes revenues for supplying dedicated personnel to customers to operate their research and testing laboratories. Revenue from leased facilities is also included in research and testing revenue.

Owner's maintenance and repair revenue is revenue TRC Inc. earned for maintaining and improving the owner's facility as a result of the Management Agreement between TRC Inc. and the facility owner. After December 31, 2017 with the MLA, TRC Inc. no longer receives these revenues from the facility owner.

Operating revenues for fiscal years 2019, 2018 and 2017 are summarized below:

	FY 2019	FY 2018	Changes	FY 2017
Research and testing agreement revenue	$ 39,124,543	$ 46,355,688	(15.60%)	$ 39,596,508
Owner's maintenance and repair revenue	-	1,884,700	(100.00%)	5,918,253
Total operating revenue	$ 39,124,543	$ 48,240,388	(18.90%)	$ 45,514,761

Research and testing revenue decreased by $7,231,145 or 15.60%, in fiscal year 2019 to $39,124,543. The government shutdown during the winter of 2019 as well as lower testing volume overall contributed to this decrease.

Operating Expenses

Major components of operating expense in fiscal years 2019, 2018 and 2017 were:

	2019	2018	Changes	2017
Direct expense	$ 15,797,910	$ 23,670,366	(33.26%)	$ 27,264,767
General and administrative expense	21,335,612	21,993,077	(2.99%)	18,707,678
Depreciation expense	891,971	694,010	28.52%	250,271
Total operating expense	$ 38,025,493	$ 46,357,453	(17.97%)	$ 46,222,716

Direct expense decreased by $7,872,456, or 33.26%, in fiscal year 2019 to $15,797,910. The decrease is a result of reduction in sales as well as the full year implementation of the MLA, which eliminated payments to HAM related to customer facility use and resulted in owner's maintenance and repair expenses, previously recorded as direct expense, now being recorded as general and administrative expense beginning on January 1, 2018.

Within general and administrative expenses, several categories saw a year over year increase greater than $100,000 including maintenance and repair related expenses, building lease and wage related expenses. Increases were offset by decreases in outside professional services and other wage related expenses, including workers compensation and pension.

Nonoperating Revenues and Expenses

Interest income reflects the interest earned from TRC Inc's operating cash account and the interest earned from investments TRC Inc. owns in the endowment fund at The Ohio State University. Interest expense relates to interest paid on the loan from the University. Gain on sales of assets reflects the sale of property and equipment.

Net Change in Value of Equity Interest in Investment Pool

TRC Inc. owns an equity interest in a long-term investment pool that is maintained and managed by The Ohio State University's Office of Investments. See further discussion under Current Assets.

Other Changes in Net Position

Capital grant revenue of $14,677,038 was received in fiscal year 2019 and is related to the SMARTCenter project.

Summary Statements of Cash Flows

TRC cash decreased $1,629,847 in 2019. Net cash flows provided by operating activities decreased $854,194 driven by a higher amount of cash paid to suppliers and taxes relative to the decrease in cash received from customers. Net cash flows provided by noncapital financing activities decreased by $3,315,029 due to an increase in long-term debt used to pay trade accounts payable in FY2018 and payments of long term debt in FY2019. Net cash flows from capital and related financing activities decreased $218,834. Cash used for additions to property and equipment were substantially offset by proceeds from related grants and loans. Total cash flow from investing activities increased $327,412 and is related to interest received from the investment pool with OSU. Prior to fiscal year 2018 the interest was reinvested, but in fiscal years 2018 and 2019 it was paid to TRC, Inc.

Summary cash flows for fiscal years 2019, 2018 and 2017 were follows:

	2019	**2018**	**2017**
Cash flows from operating activities	$ 2,548,653	$ 3,402,847	$ (235,325)
Cash flows from noncapital financing activities	(1,200,000)	2,115,029	-
Cash flows from capital and related financing activities	(3,306,678)	(3,087,845)	1,492,117
Cash flows from investing activities	328,178	766	153,567
Net (decrease) increase in cash	$ (1,629,847)	$ 2,430,797	$ 1,410,359

Transportation Research Center Inc.
Statements of Net Position
June 30, 2019 and 2018

	2019	2018
Assets		
Current assets		
Cash	$ 3,148,761	$ 4,778,608
Investments	3,991,501	4,132,026
Trade accounts receivable, net of allowance for doubtful accounts of $111,772 and $114,582	6,651,685	6,406,492
Grant receivable	1,708,368	-
Interest receivable	169,551	328,042
Supplies and prepaid expenses	557,153	855,218
Total current assets	16,227,019	16,500,386
Noncurrent assets		
Property and equipment	39,976,775	20,785,241
Less: Accumulated depreciation	(8,367,147)	(7,600,741)
Property and equipment, net	31,609,628	13,184,500
Deferred outflows related to pension and OPEB	24,238	56,008
Total assets and deferred outflows	$ 47,860,885	$ 29,740,894
Liabilities		
Current Liabilities		
Trade accounts payable	$ 2,672,308	$ 2,019,333
Lease liability	1,851,495	516,667
Accrued payroll and related expenses	1,340,866	1,069,018
Advance payments for goods and services	671,726	684,753
Short-Term Note payable	1,334,770	1,444,943
Total Current Liabilities	7,871,165	5,734,714
Long-term liabilities		
Long-term note payable	12,805,789	11,975,268
Net Pension and OPEB Liabilities	196,482	389,535
Total long-term liabilities	13,002,271	12,364,803
Total liabilities	20,873,436	18,099,517
Deferred inflows related to pension and OPEB	13,557	51,960
Net Position		
Net Investment in Capital Assets	16,474,600	1,449,172
Unrestricted net position	10,499,292	10,140,245
Total net position	26,973,892	11,589,417
Total liabilities, deferred inflows and net position	$ 47,860,885	$ 29,740,894

The accompanying notes are an integral part of these financial statements.

Transportation Research Center Inc.
Statements of Revenues, Expenses and Other Changes in Net Position
Years Ended June 30, 2019 and 2018

	2019	2018
Operating revenues		
Research and testing	$ 39,124,543	$ 46,355,688
Owner's maintenance and repair	-	1,884,700
Total operating revenues	39,124,543	48,240,388
Operating expenses		
Direct	15,797,910	23,670,366
General and administrative	21,335,612	21,993,077
Depreciation	891,971	694,010
Total operating expenses	38,025,493	46,357,453
Net operating income	1,099,050	1,882,935
Nonoperating income (expense)		
Net change in value of equity interest in investment pool	(140,525)	123,908
Gain on sale of assets	25,000	113,702
Interest income	169,686	166,682
Interest expense	(445,774)	(554,565)
Net nonoperating expense	(391,613)	(150,273)
Net income before other changes in net position	707,437	1,732,662
Other changes in net position		
Capital grant	14,677,038	-
Total other changes in net position	14,677,038	-
Change in Net Position	15,384,475	1,732,662
Net Position - Beginning of Year		
Beginning of year as previously reported	11,589,417	9,999,170
Cumulative effect of accounting change	-	(142,415)
Beginning of year as restated	11,589,417	9,856,755
Net position, end of year	$ 26,973,892	$ 11,589,417

The accompanying notes are an integral part of these financial statements.

Transportation Research Center Inc.
Statements of Cash Flows
Years Ended June 30, 2019 and 2018

	2019	2018
Cash flows from operating activities		
Cash received from customers and HAM	$ 38,739,644	$ 49,959,950
Cash paid to suppliers and HAM	(12,842,952)	(20,197,420)
Cash paid for taxes	(300,000)	(450,000)
Cash paid to employees	(17,761,250)	(20,310,946)
Cash paid for fringe benefits and payroll taxes	(5,286,789)	(5,598,737)
Net cash provided by operating activities	2,548,653	3,402,847
Cash flows from noncapital and related financing activities		
Cash paid on non-capital notes payable	(1,134,425)	(672,163)
Proceeds from non-capital notes payable	-	2,827,723
Cash paid for interest on non-capital notes payable	(65,575)	(40,531)
Net cash (used in) provided by noncapital and related financing activities	(1,200,000)	2,115,029
Cash flows from capital and related financing activities		
Proceeds from sale of property and equipment	25,000	224,868
Additions to property and equipment	(17,774,922)	(8,063,330)
Proceeds from capital grants	12,968,670	-
Cash paid on capital notes payable	(310,517)	(5,000,000)
Proceeds from capital notes payable	2,165,290	10,264,652
Cash paid for interest	(380,199)	(514,034)
Net cash used in capital and related financing activities	(3,306,678)	(3,087,844)
Cash flows from investing activities		
Interest income	328,178	766
Net cash provided by investing activities	328,178	766
Net (decrease) increase in cash and cash equivalents	(1,629,847)	2,430,798
Cash		
Beginning of period	4,778,608	2,347,810
End of period	$ 3,148,761	$ 4,778,608
Reconciliation of operating income (loss) to net cash used in operating activities		
Operating income	$ 1,099,050	$ 1,882,935
Adjustments to reconcile operating income to net cash used in operating activities:		
Depreciation	891,971	694,010
Provision for bad debt expense	136,739	80,548
Changes in assets and liabilities		
Trade accounts receivable	(379,180)	1,087,115
Supplies and prepaid expenses	298,063	(285,534)
Deferred outflows - pension and OPEB	31,769	99,097
Trade accounts payable	(891,951)	(1,366,359)
Lease liability	1,334,828	516,667
Accrued payroll and related expenses	271,847	139,141
Advance payments for goods and services	(13,027)	648,142
Net pension and OPEB liabilities	(193,053)	(135,288)
Deferred inflows - pension and OPEB	(38,403)	42,373
Net cash provided by operating activities	$ 2,548,653	$ 3,402,847
Supplemental cash flow information		
Net change in value of equity interest in investment pool	$ (140,525)	$ 123,908
Interest Receivable	169,551	328,042
Non-cash investing and financing activities		
Purchase of property and equipment included in accounts payable	2,015,602	470,676

The accompanying notes are an integral part of these financial statements.

1. Description of the Business

The Transportation Research Center of Ohio (the "Center") was created by the General Assembly of the State of Ohio in October 1972. On January 26, 1988, substantially all of the assets of the Center were sold to Honda of America Manufacturing ("HAM").

In conjunction with the sale, the legislation which initially established the Transportation Research Board was repealed. The Center was reincorporated as a not-for-profit organization, Transportation Research Center Inc. ("TRC"). TRC is organized exclusively for educational, charitable, and scientific purposes within the meaning of Section 501(c)(3) and Section 509(a)(3) of the Internal Revenue Code by conducting and supporting humanistic, scientific and engineering research and development activities solely and exclusively to the conduct of, or providing assistance in connection with the conduct of, research in automotive, vehicular and related forms of transportation, and for the development of improved highway facilities for vehicular traffic. TRC is considered a component unit of The Ohio State University ("OSU"). Therefore, TRC's financial statements are consolidated with OSU's for purposes for complying with OSU's reporting requirements.

Basis of Presentation
TRC complies with generally accepted accounting principles ("GAAP"). GAAP includes all relevant Governmental Accounting Standards Board ("GASB") pronouncements. TRC reports as a special purpose government engaged solely in "business type activities" under GASB Statements No. 34. Business type activities are those that are financed in whole or in part by fees charged to external parties for good and services. In accordance with BTA reporting, TRC presents Management's. Discussion and Analysis, a Statement of Net Position, a Statement of Revenues, Expenses and Other Changes in Net Position, a Statement of Cash Flows and Notes to the financial statements.

GASB Statement No. 34 requires that resources be classified for accounting and reporting purposes into the following net position categories:

Net Investment in Capital Assets
Property and equipment, net of accumulated depreciation, and outstanding accounts payable and debt attributable to the acquisition and construction or improvement of those assets.

Restricted
Nonexpendable
Amounts subject to externally imposed stipulations that they be maintained permanently by TRC and invested for the purpose of generating present and future income, which may either be expended or added to the principal.

Expendable
Amounts whose use by TRC is subject to externally imposed stipulations that can be fulfilled by actions of TRC pursuant to those stipulations or that expire by the passage of time.

Unrestricted
Amounts whose use by TRC is not subject to externally imposed stipulations. Unrestricted amounts may be designated for specific purposes by action of management of the Board of Trustees or may otherwise be limited by contractual agreements with outside parties.

It is TRC's policy to apply restricted resources first when an expense is incurred for which both restricted and unrestricted resources are available. TRC did not have a restricted net position at either June 30, 2019 or June 30, 2018.

2. Summary of Significant Accounting Policies

A summary of TRC's significant accounting policies applied in preparation of the financial statements is as follows:

Basis of Accounting

The financial statements of TRC have been prepared in accordance with accounting principles generally accepted in the United States of America, as prescribed by GASB.

Estimates

The preparation of financial statements in accordance with accounting principles generally accepted in the United States of America requires management to make estimates and assumptions that affect the reported amounts of assets and liabilities at the date of the financial statements and reported amounts of revenues and expenses during the reporting period. Significant estimates primarily related to valuation of certain investments, allowance for doubtful accounts and pension and other post-retirement benefits. These estimates and assumptions are based on TRC's historical results as well as management's future expectations. Actual results could differ from those estimates.

Revenue Recognition

TRC derives revenue from facility usage, personnel charges, cost reimbursement and management of the facility. Revenues for facility usage earned prior to January 1, 2018 were remitted to HAM as described in Note 6 and the related expenses are included in direct expenses. TRC evaluates the credit of customers and establishes its allowance for doubtful accounts based on its evaluation of credit risk related to individual customers. TRC does not require collateral with its receivables. TRC recognizes revenue as services are provided. Additionally, TRC receives grants for certain capital improvements. Grant revenue is recognized on an eligible expense incurred basis.

TRC derives a substantial portion of research and testing revenue from a limited number of commercial enterprises and governmental agencies. For the years ended June 30, 2019 and 2018, the revenue from the five highest volume commercial enterprises and one government agency was $28,944,105 and $37,708,526, respectively. These five customers make up $3,118,374 and $3,303,564 of TRC's accounts receivable at June 30, 2019 and 2018, respectively.

TRC accounts receivable include $1,295,937 and $1,470,431 of unbilled accounts receivable at June 30, 2019 and 2018, respectively. Unbilled accounts receivable represent revenue earned in excess of amounts billed.

Cash

TRC considers all highly liquid investments purchased with a maturity of three months or less to be cash equivalents. Cash is held in one bank at June 30, 2019 and 2018.

Investment Policy

All investments consist of TRC's equity interest in The Ohio State University Long Term Investment Pool (the "Investment Pool"). The university's Office of Financial Services commingles the funds with other university-related organizations and allocates to TRC its equity share of the Investment Pool, the value of which is based on the underlying fair value of the individual investments within the university's Investment Pool. Earned investment income is allocated to each organization based on its share of the total funds invested at the beginning of each year. The net change in the value of TRC's equity interest in the Investment Pool during the years ended June 30, 2019 and 2018 is a decrease of $140,525 and an increase of $123,908, respectively. These amounts take into account all changes in fair value of the underlying investments in the university's Investment Pool (including purchases and sales) that occurred during each respective year.

The calculation of realized gain or loss is independent of the calculation of the net increase in fair value of the underlying investments in the university's Investment Pool. As of June 30, 2019, there is a cumulative unrealized gain on investments of $149,714. As of June 30, 2018, there is a cumulative unrealized gain on investments of $290,239. Investment income from endowment investments is unrestricted by the donors, and as such becomes a part of unrestricted net position.

Property and Equipment
Property and equipment is recorded at cost. Depreciation is provided for in amounts sufficient to allocate the cost of depreciable assets to operations over the following the estimated service lives on the straight-line basis:

Type of Asset	Estimated Useful Life
Moveable furniture, fixtures, vehicles and equipment	3 to 15 years
Buildings / leasehold improvements	15 to 30 years
Software	3 to 5 years

TRC removes the asset cost and related accumulated depreciation from the appropriate accounts and reflects any gain or loss in current operations upon sale or retirements. Expenditures for maintenance, repairs or renewals, which neither materially add to the value of the property nor appreciably extend its useful life are charged to expense as incurred.

Leasehold improvements are depreciated over the shorter of the estimated useful life or the remaining period of the lease.

In the event that facts and circumstances indicate property and equipment may be impaired, the amount of the impairment is assessed based on whether the asset will continue to be used. If an asset is expected to continue to be used, the amount of the impairment is based on the most appropriate reflection of the decline in service utility of the asset as prescribed in GASB Statement No. 42, *Accounting and Financial Reporting for Impairment of Capital Assets and for Insurance Recoveries*.

Compensated Absences
Employees are granted paid time off in amounts which vary by length of service. The policy prohibits employees from accumulating unused compensated absences.

Operating and Non-Operating Activities
TRC defines operating activities, for purposes of reporting on the Statement of Revenues, Expenses and Other Changes in Net Position, as those activities that generally result from exchange transactions, such as payments received for providing services and payments made for goods and services received. With the exception of interest expense on long-term indebtedness, substantially all TRC expenses are considered operating expenses. Certain TRC revenue streams are recorded as non-operating revenues, as defined by GASB Statement No. 35, including interest income, net change in value of equity interest in the university's long-term investment pool and gain/loss on sale of assets.

Direct Expenses
TRC defines direct expenses as direct labor and direct material costs directly identified and attributed to a customer project for which revenue is recognized.

Related Party Transactions
Payments are made to OSU as reimbursement for various expenses incurred by OSU on TRC's behalf. Such payments totaled approximately $597,650 and $1,084,810 for the years ended June 30, 2019 and 2018, respectively, and are recorded as General and Administrative Expenses on the Statement of Revenues, Expenses and Other Changes in Net Position.

Newly Issued Accounting Pronouncements
In January 2017, the GASB issued Statement No. 84, *Fiduciary Activities*. This standard establishes criteria for identifying and reporting fiduciary activities of all state and local governments. The focus of the criteria generally is whether a government is controlling the assets of the fiduciary activity and the beneficiaries with whom a fiduciary relationship exists. Governments with activities meeting the criteria are required to present these activities in a statement of fiduciary net position and a statement of changes in fiduciary net position. An exception to this requirement is provided for a business-type activity that expects to hold assets in a custodial fund for three months or less. This standard is effective for periods beginning after December 15, 2018 (FY2020).

In June 2017, the GASB issued Statement No. 87, *Leases*. This standard establishes accounting and reporting for leases, based on the foundational principle that all leases are financings of the right to use an underlying asset for a period of time. Lessees will record an intangible right-of-use asset and corresponding lease liability. Lessors will record a lease receivable and a corresponding deferred inflow of resources. The standard provides an exception for short-term leases with a maximum possible term of 12 months or less. This standard is effective for periods beginning after December 15, 2019 (FY2021).

TRC management is currently assessing the impact that implementation of GASB Statements 84 and 87 will have on TRC's financial statements.

Implementation of GASB Statement No. 75
In fiscal year 2018, TRC implemented GASB Statement No. 75, *Accounting and Financial Reporting for Postemployment Benefits Other Than Pensions*. This statement requires employers in cost-sharing, multi-employer plans to recognize a proportionate share of the net other post-employment benefit (OPEB) liabilities of the plans. Certain TRC employees participate in the Ohio Public Employees Retirement System (OPERS), a cost-sharing multiple-employer retirement plan that provides pensions and post-retirement healthcare benefits. A proportionate share of the net OPEB liabilities of the retirement systems has been allocated to TRC, based on retirement plan contributions for TRC employees. The cumulative effect of adopting GASB Statement No. 75 was a $142,415 reduction in TRC's net position as of July 1, 2017. Additional information regarding net OPEB liabilities, related deferrals and OPEB expense is provided in Note 9.

Early Implementation of GASB Statement No. 89
On July 1, 2017, TRC early-implemented GASB Statement No. 89, *Accounting for Interest Cost Incurred before the End of a Construction Period*. This standard requires that interest cost incurred during the period of construction be recognized as an expense in the period in which the cost is incurred. These costs will no longer be included in the historical cost of capital assets. In accordance with the provisions of GASB 89, the standard was applied on a prospective basis, and thus there was no effect on amounts previously reported.

3. Income Taxes

In July 1989, TRC received Internal Revenue Service ("IRS") approval of its tax-exempt status under Section 501(c) (3) of the Internal Revenue Code. In addition, because of its relationship as a supporting organization of OSU, TRC has received qualification from the IRS as a public charity and, therefore, is not subject to various taxes and restrictions applicable to other organizations, such as private foundations.

TRC is subject to unrelated business income tax for the leasing of certain TRC employees. Unrelated income tax expense in 2019 is estimated to be approximately $261,264 and was $268,033 for 2018.

4. Cash and Investments

Cash and investments at June 30, 2019 and 2018 were as follows:

	2019	2018
Cash on hand	$ 600	$ 600
Cash in bank	3,148,161	4,778,008
Investment in OSU's long term investment pool	3,991,501	4,132,026
Total	$ 7,140,262	$ 8,910,634

At June 30, 2019 and 2018, the bank statement balances of cash in banks were $4,428,124 and $5,201,537, respectively. Of the bank statement balances, $4,428,124 and $5,201,537, respectively, represented overnight sweep investments which are not covered by the FDIC.

TRC's investments are maintained in the university's Investment Pool and, as such, all collateralization is held by the university. The Investment Pool consists of more than 5,000 named funds. Each named fund is assigned a number of shares, based on the value of the gifts, income-to-principal transfers, or transfers of operating funds to that named fund. The Investment Pool is invested in a diversified portfolio of equities and fixed income securities, as well as a number of alternative investment funds, such as real estate limited partnerships, hedge funds, private equity funds, venture capital funds and natural resources funds. The Investment Pool is intended to provide the long-term growth necessary to preserve the value of these funds, adjusted for inflation, while making distributions to support TRC's mission.

Annual distributions to named funds in the Investment Pool are computed using the share method of accounting for pooled investments. For the years ended June 30, 2019 and 2018, the annual distribution per share was 4.5% of the average fair value per share of the Investment Pool over the most recent seven-year period.

TRC Inc. held 649.2046 shares in the university's Investment Pool June 30, 2019 and 2018, respectively. The value of TRC's equity interest in the university's Investment Pool was $3,991,501 and $4,132,026 at June 30, 2019 and 2018, respectively. There were no realized gains or losses during the years ended June 30, 2019 and 2018. Total net unrealized gain (loss) for the years ended June 30, 2019 and 2018 were $(140,525) and $123,908 respectively. TRC may redeem its shares in the university Investment Pool at its discretion.

The university holds certain types of alternative investments funds which are carried at the net assets value provided by the management of these funds, which represents estimated fair value. The purpose of this alternative investment fund class is to increase portfolio diversification and reduce risk due to the low correlation with other asset classes.

Management of the alternative investment funds, namely the general partner, use methods, such as discounted cash flows, recent transactions and other model-based calculations, to estimate the fair value of the investments held by the fund.

5. Property and Equipment

The property and equipment balance at June 30, 2019 consists of the following:

	Balance June 30, 2018	Additions	Disposals/ Transfers	Balance June 30, 2019
Capital assets				
Building/leasehold Improvements	$ 11,112,815	$ 3,667,875	$ -	$ 14,780,690
Vehicles and equipment	4,817,323	1,694,118	(125,565)	6,385,876
Construction-in-progress	3,732,698	16,852,010	(2,954,434)	17,630,274
Software	967,541	-	-	967,541
Other	154,864	57,530	-	212,394
Total capital assets	20,785,241	22,271,533	(3,079,999)	39,976,775
Less accumulated depreciation				
Building/leasehold Improvements	3,456,458	417,000	-	3,873,458
Vehicles and equipment	3,955,506	358,456	(125,565)	4,188,397
Software	79,734	113,775	-	193,509
Other	109,043	2,740	-	111,783
Total accumulated depreciation	7,600,741	891,971	(125,565)	8,367,147
Property and equipment, net	$ 13,184,500	$ 21,379,562	$ (2,954,434)	$ 31,609,628

The property and equipment balance at June 30, 2018 consists of the following:

	Balance June 30, 2017	Additions	Disposals/ Transfers	Balance June 30, 2018
Capital assets				
Building/leasehold Improvements	$ 3,228,423	$ 7,884,392	$ -	$ 11,112,815
Vehicles and equipment	5,123,322	322,914	(628,913)	4,817,323
Construction-in-progress	7,530,225	4,421,883	(8,219,410)	3,732,698
Software	797,337	170,204	-	967,541
Other	86,132	68,732	-	154,864
Total capital assets	16,765,439	12,868,125	(8,848,323)	20,785,241
Less accumulated depreciation				
Building/leasehold Improvements	3,106,944	349,514	-	3,456,458
Vehicles and equipment	4,218,110	255,140	(517,744)	3,955,506
Software	13,289	66,445	-	79,734
Other	86,132	22,911	-	109,043
Total accumulated depreciation	7,424,475	694,010	(517,744)	7,600,741
Property and equipment, net	$ 9,340,964	$ 12,174,115	$ (8,330,579)	$ 13,184,500

6. Management and Master Lease Agreements with HAM

Prior to January 1, 2018, HAM, which is the owner of the Transportation Research Center of Ohio facilities, retained TRC as the sole and exclusive manager and agent to control, manage, supervise and direct the operations of the facility under the terms of a Management Agreement. Under the Management Agreement, TRC remitted to HAM certain revenues for use of the facilities (owner revenues). Additionally, expenses for repairs and capital improvements made by TRC were reimbursed by HAM (owner expenses). In the Statement of Revenues, Expenses and Other Changes in Net Position, the amounts TRC remitted to HAM were recorded as direct expenses, and the amounts reimbursed by HAM were recorded as owner's maintenance and repair revenues. For the years ended June 30, 2019 and 2018 the amounts of transactions with HAM were as follows:

	2019	**2018**
Owner revenues	$ -	$ 3,117,215
Owner expenses	-	1,884,700

On December 21, 2017, after a 30-year business relationship, TRC entered into a master lease agreement with HAM (the "HAM Lease") for portions of the TRC real property and related improvements, effective January 1, 2018. The Management Agreement between TRC and HAM was terminated, effective December 31, 2017.

The initial term of the HAM Lease is for approximately 14 years and three months, ending March 31, 2032. At the end of the initial term, at the option of HAM and TRC, the lease will renew for one 15-year renewal term. Under the HAM Lease, TRC pays rent to HAM, retains all revenues related to facilities usage and is responsible for maintenance and repairs to the leased facilities. At June 30, 2019, TRC was not in compliance with certain provisions of the master lease agreement with HAM, which could lead to an event of default, as defined in the master lease agreement. An event of default could result in HAM terminating the agreement. As of June 30, 2019, HAM has issued no notice of default.

TRC and OSU have separately entered into a letter of support arrangement, whereby OSU has agreed to support the operational needs of TRC should TRC be unable to support its own operations.

The total rental expense under the HAM Lease, which is being recognized on a straight-line basis over the initial term of the lease, was $2,125,162 and $1,091,315 for the year ended June 30, 2019 and 2018, respectively, and is include in general and administrative expenses. In conjunction with the HAM Lease, HAM and its affiliates separately agreed to rent certain portions of the facility from TRC over a period of approximately 14 years and three months. TRC recognized rental income of $1,037,411 and $518,706 during the year ended June 30, 2019 and 2018, respectively, which is included in research and testing revenues. TRC reports the rental income on a gross basis, separate from the rental expense incurred under the terms of the HAM Lease. Gross future minimum payments under the HAM lease and other TRC leases is provided in Note 10.

TRC also earns research and testing revenues from Honda of America Manufacturing and affiliated entities outside of the Management Agreement and the HAM Lease. Revenues attributed to HAM and HAM affiliates were $12,858,874 and $18,636,603 for the years ended June 30, 2019 and 2018, respectively. Trade accounts receivable at June 30, 2019 and 2018 included $1,164,747 and $1,262,509, respectively, from HAM and affiliated entities related to these research, testing and facility usage revenues. Although HAM and its affiliates pay TRC Inc. for facility use, each entity is individually responsible for payment of their associated facility use fees.

7. Deferred Compensation Plan

TRC's employees are able to participate in a deferred compensation plan (the "Plan") created in accordance with Internal Revenue Code Section 457. The Plan permits employees to defer a portion of their salary until future years. The deferred compensation is not available to employees until termination, retirement, death or unforeseeable emergency.

All amounts of compensation deferred under the Plan, all property and rights purchased with these amounts and all income attributable to those amounts, property or rights (until paid or made available to the employee or other beneficiary) are solely the property and rights of the Ohio Public. Employees Deferred Compensation Program ("OPEDC"). In accordance with GASB Statement No. 32, TRC has not recorded any deferred compensation assets or liabilities in the financial statements.

8. Net Position

TRC's Code of Regulations specify that TRC shall, within 120 days of the end of TRC's fiscal year, transfer any accumulated surplus in excess of its January 27, 1988 fund balance, less $911,466, or $6,677,225, or such lesser amount authorized by the Board, to the endowment portfolio of The Ohio State University to form a fund, the income from which is to be used as determined by the Board of Trustees of The Ohio State University for the support and encouragement of research in automotive, vehicular and related forms of transportation, and for the development of improved highway facilities for vehicular traffic. Upon such transfer, those funds shall no longer be available to pay for any of TRC's obligations. If net position funds fall below $6,677,225, no transfer may take place.

In the past, the TRC Board has typically authorized an amount to be transferred equating to the fiscal year's excess of revenues over expenses less any unrealized change in the fair value of investments. During the years ended June 30, 2019 and 2018, at the Board's direction, no funds were transferred.

TRC's Articles of Incorporation stipulate that upon the ultimate dissolution of TRC, any remaining funds shall be paid to The Ohio State University and be devoted exclusively to public purposes and/or other purposes permissible under Code Section 501(c)(3), with any cash, marketable securities, investments and accounts receivable being transferred to the endowment portfolio of The Ohio State University to form a fund, the income from which is to be used as determined by the Board of Trustees of The Ohio State University for the support and encouragement of research in automotive, vehicular and related forms of transportation, and for the development of improved highway facilities for vehicular traffic. However, if at the time of dissolution of TRC, The Ohio State University is not an organization described in Code Section 170(c)(1), TRC's remaining assets shall be paid over to such organization or organizations as shall be selected by the affirmative vote of a majority of the Board of Directors, provided, however, that such organization or organizations shall be exempt from federal income taxation and described in either Section 170(c)(1) or Code Section 501(c)(3) with such remaining assets to be devoted exclusively to public purposes and/or other purposes permissible under Code Section 501(c)(3).

At June 30, 2019 and 2018, the net position was comprised of the following:

	2019	2018
Net Investment in Capital Assets	$ 16,474,600	$ 1,449,172
Unrestricted net position	10,499,292	10,140,245
Total net position	$ 26,973,892	$ 11,589,417

Unrestricted net position includes a cumulative unrealized gain (loss) in investments at June 30, 2019 and 2018 of $149,714 and $290,239, respectively.

9. Defined Benefit Pension Plan and Post-Employment Benefits

As part of the formation of TRC on January 27, 1988, existing employees were given the option to continue participation in the Ohio Public Employees Retirement System ("OPERS"), a cost sharing, multiple employer defined benefit pension plan. The following disclosure reflects the portion of TRC employees who opted to continue to participate in OPERS. Since the time of formation, new employees of TRC are not eligible to participate in this plan.

OPERS offers retirement and disability benefits, annual cost-of-living adjustments, and death benefits to plan members and beneficiaries. In addition, OPERS provides other post-employment benefits (OPEB), consisting primarily of healthcare. Benefits are established by state statute and are calculated using formulas that include years of service and final average salary as factors. OPERS issues separate, publicly available financial reports that include financial statements and required supplemental information. These reports may be obtained by contacting the organization.

OPERS, Attn: Finance Director
277 East Town Street
Columbus, OH 43215-4642
(614) 222-5601
(800) 222-7377
www.opers.org/investments/cafr.shtml

In accordance with GASB Statements Nos. 68 and 75, employers participating in cost-sharing multiple-employer plans are required to recognize a proportionate share of the collective net pension and OPEB liabilities of the plans. Although changes in the net pension and OPEB liabilities generally are recognized as expense in the current period, certain items are deferred and recognized as expense in future periods. Deferrals for differences between projected an actual investment returns are amortized to pension expense over five years. Deferrals for employer contributions subsequent to the measurement date are amortized in the following period (one year). Other deferrals are amortized over the estimated remaining service lives of both active and inactive employees (amortization periods are approximately 3 years).

The collective net pension liabilities of OPERS and TRC's proportionate share of these liabilities as of June 30, 2019 and 2018 are as follows:

	2019	2018
Net pension liability - all employers	$ 27,387,972,593	$ 15,688,061,327
Proportion of the net pension liability - TRC	0.0005 %	0.00150 %
Proportionate share of net pension liability	$ 136,118	$ 236,419

The collective net OPEB liabilities of OPERS and TRC's proportionate share of these liabilities as of June 30, 2019 and 2018 are as follows:

	2019	2018
Net OPEB liability - all employers	$ 13,037,639,421	$ 10,859,263,395
Proportion of the net OPEB liability - TRC	0.0005 %	0.0014 %
Proportionate share of net OPEB liability	$ 60,364	$ 153,116

Deferred outflows of resources and deferred inflows of resources for pensions were related to the following sources as of June 30, 2019 and 2018:

	2019	2018
Deferred Outflows of Resources:		
Differences between expected and actual experience	$ 18	$ 268
Changes in assumptions	13,604	31,572
Employer contributions subsequent to the measurement date	4,700	12,900
Total	$ 18,322	$ 44,740
Deferred Inflows of Resources:		
Differences between expected and actual experience	$ 3,222	$ 4,759
Net difference between projected and actual earnings on pension plan investments	7,193	35,794
Total	$ 10,415	$ 40,553

Deferred outflows of resources and deferred inflows of resources for OPEB were related to the following sources as of June 30, 2019 and 2018:

	2019	2018
Deferred Outflows of Resources:		
Differences between expected and actual experience	$ 62	$ 120
Changes in assumptions	5,854	11,148
Total	$ 5,916	$ 11,268
Deferred Inflows of Resources:		
Differences between expected and actual experience	$ 164	$ -
Net difference between projected and actual earnings on OPEB plan investments	2,978	11,406

Net deferred outflows of resources and deferred inflows of resources related to pensions will be recognized in pension expense during the years ending June 30 as follows:

	OPERS
2020	$ 20,773
2021	(9,195)
2022	(12,264)
2022	8,592
Total	$ 7,906

Net deferred outflows of resources and deferred inflows of resources related to OPEB will be recognized in OPEB expense during the years ending June 30 as follows:

	OPEB
2020	$ 3,867
2021	(1,027)
2022	(1,459)
2023	1,393
Total	$ 2,774

Summary of Employer Pension and OPEB Expense

Total pension and OPEB expense for the years ended June 30, 2019 and 2018, including employer contributions and accruals associated with recognition of net pension liabilities, net OPEB liabilities and related deferrals, is presented below.

	2019	2018
Employer Contributions	$ -	$ 16,277
GASB 68 Pension Accruals	(104,020)	(4,656)
GASB 75 OPEB Accruals	(95,665)	10,839
Total Pension and OPEB Expense	$ (199,685)	$ 22,460

Total pension and OPEB expense is included in direct operating expenses in the Statement of Revenues, Expenses and Other Changes in Net Position.

The following table provides additional details on the benefit formulas, contribution requirements and significant assumptions used in the measurement of total pension and OPEB liabilities for OPERS (information below applies to both pensions and OPEB unless otherwise indicated).

	OPERS
Statutory Authority	Ohio Revised Code Chapter 145
Benefit Formula	**Pensions** -- Benefits are calculated on the basis of age, final average salary (FAS), and service credit. State and Local members in transition Groups A and B are eligible for retirement benefits at age 60 with five years of service credit or at age 55 with 25 or more years of service credit. Group C for State and Local is eligible for retirement at age 57 with 25 years of service or at age 62 with five years of service. For Groups A and B, the annual benefit is based on 2.2% of final average salary multiplied by the actual years of service for the first 30 years of service credit and 2.5% for years of service in excess of 30 years. For Group C, the annual benefit applies a factor of 2.2% for the first 35 years and a factor of 2.5% for the years of service in excess of 35. FAS represents the average of the three highest years of earnings over a member's career for Groups A and B. Group C is based on the average of the five highest years of earnings over a member's career.
	The base amount of a member's pension benefit is locked in upon receipt of the initial benefit payment for calculation of annual cost-of-living adjustment. **OPEB** – The Ohio Revised Code permits, but does not require, OPERS to offer post-employment health care coverage. The ORC allows a portion of the employers' contributions to be used to fund health care coverage. The health care portion of the employer contribution rate for the Traditional Pension Plan and Combined Plan is comparable, as the same coverage options are provided to participants in both plans. Beginning January 1, 2015, the service eligibility criteria for health care coverage increased from 10 years to 20 years with a minimum age of 60, or 30 years of qualifying service at any age. Beginning with January 2016 premiums, Medicare-eligible retirees could select supplemental coverage through the Connector, and may be eligible for monthly allowances deposited to an HRA to be used for reimbursement of eligible health care expenses. Coverage for non-Medicare retirees includes hospitalization, medical expenses and prescription drugs. The System determines the amount, if any, of the associated health care costs that will be absorbed by the System and attempts to control costs by using managed care, case management, and other programs. Additional details on health care coverage can be found in the Plan Statement in the OPERS 2018 CAFR. OPERS no longer participates in the Medicare Part D program as of December 31, 2016. In 2018, OPERS received the final distribution of funds from the Medicare Part D program for calendar year 2016 of $378,007.

	OPERS
Cost-of-Living Adjustments (COLAs)	Once a benefit recipient retiring under the Traditional Pension Plan has received benefits for 12 months, current law provides for an annual COLA. The COLA is calculated on the member's base pension benefit at the date of retirement and is not compounded. Members retiring under the Combined Plan receive a COLA on the defined benefit portion of their pension benefit. For those who retired prior to January 7, 2013, current law provides for a 3% COLA. For those retiring subsequent to January 7, 2013, beginning in calendar year 2019, current law provides that the adjustment will be based on the average percentage increase in the Consumer Price Index, capped at 3%.
Contribution Rates	Employee and member contribution rates are established by the OPERS Board and limited by Chapter 145 of the Ohio Revised Code. For 2018, employer rates for the State and Local Divisions were 14% of covered payroll (and 18.1% for the Law Enforcement and Public Safety Divisions). Member rates for the State and Local Divisions were 10% of covered payroll (13% for Law Enforcement and 12% for Public Safety).
Measurement Date	December 31, 2018 (OPEB is rolled forward from December 31, 2017 actuarial valuation date)
Actuarial Assumptions	**Valuation Date:** December 31, 2018 for pensions; December 31, 2017 for OPEB **Actuarial Cost Method:** Individual entry age **Investment Rate of Return:** 7.2% for pensions; 6.0% for OPEB **Inflation:** 3.25% **Projected Salary Increases:** 3.25% - 10.75% **Cost-of-Living Adjustments:** 3.00% Simple – for those retiring after January 7, 2013, 3.00% Simple through 2018, then 2.15% Simple. **Health Care Cost Trends:** 10.0% initial; 3.25% ultimate

	OPERS
Mortality Rates	Pre-retirement mortality rates are based on the RP-2014 Employees mortality table for males and females, adjusted for mortality improvement back to the observation period base year of 2006. The base year for males and females was then established to be 2015 and 2010, respectively. Post-retirement mortality rates are based on the RP-2014 Healthy Annuitant mortality table for males and females, adjusted for mortality improvement back to the observation period base year of 2006. The base year for males and females was then established to be 2015 and 2010, respectively. Post-retirement mortality rates for disabled retirees are based on the RP-2014 Disabled mortality table for males and females, adjusted for mortality improvement back to the observation period base year of 2006. The base year for males and females was then established to be 2015 and 2010, respectively. Mortality rates for a particular calendar year are determined by applying the MP-2015 mortality improvement scale to all of the above described tables.
Date of Last Experience Study	December 31, 2015

	OPERS
Investment Return Assumptions	The long term expected rates of return on defined benefit pension and health care investment assets were determined using a building-block method in which best-estimate ranges of expected future real rates of return are developed for each major asset class. These ranges are combined to produce the long-term expected rate of return by weighting the expected future real rates of return by the target asset allocation percentage, adjusted for inflation. The following table displays the Board-approved asset allocation policy for defined benefit pension assets for 2018 and the long-term expected real rates of return:

Asset Class	Target Allocation	Long Term Expected Return*
Fixed Income	23.0%	2.79%
Domestic Equity	19.0%	6.21%
Real Estate	10.0%	4.90%
Private Equity	10.0%	10.81%
International Equity	20.0%	7.83%
Other Investments	18.0%	5.50%
Total	100.0%	

The following table displays the Board-approved asset allocation policy for health care assets for 2018 and the long-term expected real rates of return:

Asset Class	Target Allocation	Long Term Expected Return*
Fixed Income	34.0%	2.42%
Domestic Equities	21.0%	6.21%
REITs	6.0%	5.98%
International Equity	22.0%	7.83%
Other Investments	17.0%	5.57%
Total	100.0%	

* Returns presented as arithmetic means

	OPERS
Discount Rate	**Pensions** -- The discount rate used to measure the total pension liability was 7.2% for the Traditional Pension Plan, the Combined Plan and the Member-Directed Plan. The projection of cash flows used to determine the discount rate assumed that contributions from plan members and those of the contributing employers are made at the contractually required rates, as actuarially determined. Based on those assumptions, the pension plan's fiduciary net position was projected to be available to make all projected future benefit payments of current plan members. Therefore, the long-term expected rate of return on pension plan investments was applied to all periods of projected benefit payments to determine the total pension liability. **OPEB** – A single discount rate of 3.96% was used to measure the OPEB liability on the measurement date of December 31, 2018. Projected benefit payments are required to be discounted to their actuarial present value using a single discount rate that reflects (1) a long-term expected rate of return on OPEB plan investments (to the extent that the health care fiduciary net position is projected to be sufficient to pay benefits), and (2) tax-exempt municipal bond rate based on an index of 20-year general obligation bonds with an average AA credit rating as of the measurement date (to the extent that the contributions for use with the long-term expected rate are not met). This single discount rate was based on an expected rate of return on the health care investment portfolio of 6.00% and a municipal bond rate of 3.71%. The projection of cash flows used to determine this single discount rate assumed that employer contributions will be made at rates equal to the actuarially determined contribution rate. Based on these assumptions, the health care fiduciary net position and future contributions were sufficient to finance health care costs through 2031. As a result, the long-term expected rate of return on health care investments was applied to projected costs through the year 2031, and the municipal bond rate was applied to all health care costs after that date.
Changes in Assumptions Since the Prior Measurement Date	N/A
Benefit Term Changes Since the Prior Measurement Date	**Pensions** -- For those retiring subsequent to January 7, 2013, beginning in calendar year 2019, current law provides that the COLA adjustment will be based on the average percentage increase in the Consumer Price Index, capped at 3%.

	OPERS		
Sensitivity of Net Pension Liability to Changes in Discount Rate	**1% Decrease (6.2%)**	**Current Rate (7.2%)**	**1% Increase (8.2%)**
	$ 201,737	$ 136,118	$ 81,624
Sensitivity of Net OPEB Liability to Changes in Discount Rate	**1% Decrease (2.96%)**	**Current Rate (3.96%)**	**1% Increase (4.96%)**
	$ 77,226	$ 60,364	$ 46,952
Sensitivity of Net OPEB Liability to Changes in Medical Trend Rate	**1% Decrease Trend Rate**	**Current Rate Trend Rate**	**1% Increase Trend Rate**
	$ 58,022	$ 60,364	$ 63,059

10. Leases

TRC leases various buildings to TRC's customers. Lease terms range with various renewal option features. The leases are accounted for as operating leases. For the years ended June 30, 2019 and 2018, lease revenue included in research and testing revenues was $2,770,517 and $1,821,786, respectively. At June 30, 2019, future minimum lease receipts are due as follows:

2020	$ 2,825,907
2021	2,768,483
2022	2,749,341
2023	2,477,741
2024	2,241,141
2025 - 2029	11,205,707
2030 - 2034	6,794,257
2035 - 2039	83,580
2040 - 2044	54,327
Total	$ 31,200,484

Under the HAM Lease, TRC leases research and testing facilities and office space from HAM with terms expiring through March 31, 2032. The lease amount is subject to annual adjustment based on the consumer price index. In addition to the base rent outlined below, TRC remits estimated monthly property tax payments to HAM as part of lease agreement. TRC also leases a fleet of vehicles from Enterprise for use by employees. The lease term is five years on a vehicle by vehicle basis with terms expiring through April 2023. As of June 30, 2019, future minimum rental payments under operating leases with initial terms in excess of one year are summarized as follows:

2020	$ 513,983
2021	525,537
2022	537,554
2023	523,193
2024	471,905
2025 - 2029	12,743,527
2030 - 2034	8,505,692
Total	$ 23,821,391

Rental expense charged to operations was $2,314,495 and $1,682,319 for the years ended June 30, 2019 and 2018, respectively, and is included in general and administrative expenses.

11. Long-term Notes Payable

In July 2016, TRC entered into a Memorandum of Understanding with OSU to provide an $8,000,000 line of credit for infrastructure improvements. The annual interest rate for the loan is 4.75% and has a 15-year term. Monthly interest-only payments will be made during the construction period. The final amortization schedule will be determined upon completion of construction. At June 30, 2019, TRC has made net draws totaling $3,000,000 and has available borrowing capacity of $5,000,000.

In July of 2017, TRC entered in a Memorandum of Understanding with OSU to provide a $3,264,652 loan to fund SMARTCenter construction site costs. The annual interest rate for the loan was 5.25% and had a 20-year term. In June of 2018, TRC entered into a Memorandum of Understanding (Addendum 1) that increased the capacity of this loan to $12,500,000. During the year ended June 30, 2019, TRC made draws of $2,165,291 under this loan. At June 30, 2019, TRC's available capacity under this loan was $7,070,057. The annual interest rate was modified to 4.75% and has a 30-year term. Monthly interest-only payments will be made during the construction period. After construction is complete, TRC Inc. and OSU will evaluate when principal payments will begin.

In December 2017 TRC entered into a Memorandum of Understanding with OSU to provide a $2,615,028 loan to pay certain required amounts to HAM according to the MLA. The annual interest rate for the loan is 4% and has a 28-month term. Monthly principal and interest payments are required in the amount of $100,000.

In May 2018, TRC closed on a loan with Ohio Development Service Agency in the amount of $5,000,000 to reimburse funds spent to build the new conference center, customer workbay and traffic control system. The proceeds of this loan were used to repay a portion of the outstanding borrowings on the OSU line of credit. The annual interest rate for the loan is 1% and has 15-year term. The loan anticipates the total project investment will be $8,000,000 and requires TRC to create ten new jobs and retain 318 existing jobs by December of 2020. Failure to create and retain the specified jobs may result in an increase to the annual interest rate of the loan. As of June 30, 2019, TRC has complied with all covenants set forth within the arrangement.

In May 2018, TRC closed on a loan with Ohio Development Service Agency in the amount of $2,875,000 to provide additional funding for the SMART Center. The annual interest rate for the loan is 1% and has a 15-year term. The loan anticipates the total project investment will be $45,000,000 and requires TRC to create five new jobs and retain 328 existing jobs by December of 2020. Failure to create and retain the specified jobs may result in an increase to the annual interest rate of the loan. As of June 30, 2019, TRC had not made any borrowings under this agreement.

Debt activity for the year ended June 30, 2019 is as follows:

	Beginning Balance	Additions	Repayments	Ending Balance	Current Portion
OSU Loans	$ 8,420,211	$ 2,165,290	$ 1,134,425	$ 9,451,076	$ 1,021,133
JobsOhio - Infastructure Loan	5,000,000	-	310,517	4,689,483	313,637
Total	$ 13,420,211	$ 2,165,290	$ 1,444,942	$ 14,140,559	$ 1,334,770

Debt activity for the year ended June 30, 2018 were as follows:

	Beginning Balance	Additions	Repayments	Ending Balance	Current Portion
OSU Loans	$ 6,000,000	$ 8,092,375	$ 5,672,164	$ 8,420,211	$ 1,134,426
JobsOhio - Infastructure Loan	-	5,000,000	-	5,000,000	310,517
Total	$ 6,000,000	$ 13,092,375	$ 5,672,164	$ 13,420,211	$ 1,444,943

Principal payments to unrelated parties on notes are due as follows:

2020	$ 313,637
2021	316,788
2022	319,970
2023	323,184
2024 - 2034	3,415,904
Total	$ 4,689,483

Principal payments to related parties on notes are due as follows:

2020	$ 1,021,133
2021	-
2022	-
2023	-
2024-2049	5,429,943
Total	$ 6,451,076

12. Risk Management

During the course of the year, TRC is subjected to certain types of risks in the performance of its normal functions. These risks include risks that TRC might be subjected to by its employees in the performance of their normal duties. TRC manages these types of risks through commercial insurance.

13. Employees' Retirement Savings Plan and Trust

TRC maintains the Employees' Retirement Savings Plan and Trust (the "Plan"). The Plan is intended to comply with Section 401(a) of the Internal Revenue Code. All employees are eligible to participate in the Plan. Employer contributions to the Plan are determined solely at the discretion of TRC's board of directors. For the years ended June 30, 2019 and 2018, TRC expended $489,594 and $479,726, respectively, for contributions to the Plan, which are included in direct and general and administrative operating expenses in the Statements of Revenues, Expenses and Other Charges in Net Position.

Transportation Research Center Inc.
Required Supplementary Information on GASB 68 Pension Liabilities and GASB 75 OPEB Liability (Unaudited)
June 30, 2019, 2018, 2017, 2016 and 2015

Schedule of Proportionate Share of the Net Pension Liability	**2019**	**2018**	**2017**	**2016**	**2015**
TRC proportion of the collective net pension liability	0.000 %	0.000 %	0.000 %	0.000 %	0.000 %
TRC proportionate share of the net pension liability	$ 136,118	$ 236,419	$ 382,408	$ 365,998	$ 295,980
TRC covered payroll	67,186	162,766	236,058	304,372	326,793
TRC proportionate share of the net pension liability as a percentage of its covered payroll	203 %	145 %	162 %	120 %	90.6 %
Plan fiduciary net position as a percentage of the total pension liability	74.7 %	84.7 %	77.4 %	81.2 %	86.5 %

Schedule of University Contributions	**2019**	**2018**	**2017**	**2016**	**2015**
Contractually required contribution	$ -	$ 16,277	$ 29,941	$ 31,652	$ 45,571
Contributions in relation to the contractually required contribution	-	16,277	29,941	31,652	45,571
Contribution deficiency (excess)	$ -	$ -	$ -	$ -	$ -
TRC covered payroll	$ -	$ 162,766	$ 236,058	$ 304,372	$ 326,793
Contributions as a percentage of covered payroll	0.0 %	10.0 %	12.7 %	10.4 %	13.9 %

Schedule of Proportionate Share of the Net OPEB Liability	**2019**	**2018**
TRC proportion of the collective net OPEB liability	0.0005 %	0.0014 %
TRC proportionate share of the net OPEB liability	$ 60,364	$ 153,116
TRC covered payroll	67,186	162,766
TRC proportionate share Of the net OPEB liability as a percentage of its covered payroll	89.8 %	94.1 %
Plan fiduciary net position as a percentage of the total OPEB liability	46.3 %	84.7 %

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Report of Independent Auditors on Internal Control Over Financial Reporting and on Compliance and Other Matters Based on an Audit of Financial Statements Performed in Accordance with *Government Auditing Standards*

To the Board of Directors of
Transportation Research Center Inc.:

We have audited, in accordance with auditing standards generally accepted in the United States of America and the standards applicable to financial audits contained in *Government Auditing Standards,* issued by the Comptroller General of the United States, the financial statements of Transportation Research Center Inc. ("TRC"), a component unit of The Ohio State University, appearing on pages 10 to 32, which comprise the statement of net position as of June 30, 2019, and the related statements of revenues, expenses, and other changes in net position and of cash flows for the year then ended, and the related notes to the financial statements, and have issued our report thereon dated November 7, 2019.

Internal Control Over Financial Reporting

In planning and performing our audit of the financial statements, we considered TRC's internal control over financial reporting ("internal control") to determine the audit procedures that are appropriate in the circumstances for the purpose of expressing our opinion on the financial statements, but not for the purpose of expressing an opinion on the effectiveness of TRC's internal control. Accordingly, we do not express an opinion on the effectiveness of TRC's internal control.

A *deficiency in internal control* exists when the design or operation of a control does not allow management or employees, in the normal course of performing their assigned functions, to prevent, or detect and correct, misstatements on a timely basis. A *material weakness* is a deficiency, or a combination of deficiencies, in internal control such that there is a reasonable possibility that a material misstatement of the entity's financial statements will not be prevented, or detected and corrected on a timely basis. A *significant deficiency* is a deficiency, or a combination of deficiencies, in internal control that is less severe than a material weakness, yet important enough to merit attention by those charged with governance.

Our consideration of internal control was for the limited purpose described in the first paragraph of this section and was not designed to identify all deficiencies in internal control that might be material weaknesses or significant deficiencies. Given these limitations, during our audit we did not identify any deficiencies in internal control that we consider to be material weaknesses. However, material weaknesses may exist that have not been identified.

Compliance and Other Matters

As part of obtaining reasonable assurance about whether TRC's financial statements are free from material misstatement, we performed tests of its compliance with certain provisions of laws, regulations, contracts and grant agreements, noncompliance with which could have a direct and material effect on the determination of financial statement amounts. However, providing an opinion on compliance with those provisions was not an objective of our audit, and accordingly, we do not express such an opinion. The results of our tests disclosed no instances of noncompliance or other matters that are required to be reported under *Government Auditing Standards*.

Purpose of this Report

The purpose of this report is solely to describe the scope of our testing of internal control and compliance and the results of that testing, and not to provide an opinion on the effectiveness of the entity's internal control or on compliance. This report is an integral part of an audit performed in accordance with *Government Auditing Standards* in considering the entity's internal control and compliance. Accordingly, this communication is not suitable for any other purpose.

PricewaterhouseCoopers LLP

November 7, 2019

OHIO AUDITOR OF STATE
KEITH FABER

THE OHIO STATE UNIVERSITY TRANSPORTATION RESEARCH CENTER, INC.

FRANKLIN COUNTY

CLERK'S CERTIFICATION

This is a true and correct copy of the report which is required to be filed in the Office of the Auditor of State pursuant to Section 117.26, Revised Code, and which is filed in Columbus, Ohio.

Susan Babbitt

CLERK OF THE BUREAU

CERTIFIED
DECEMBER 5, 2019