

Recommended Wake County Transit Plan

A Wake County Transit Investment Strategy Report



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Kimley»Horn

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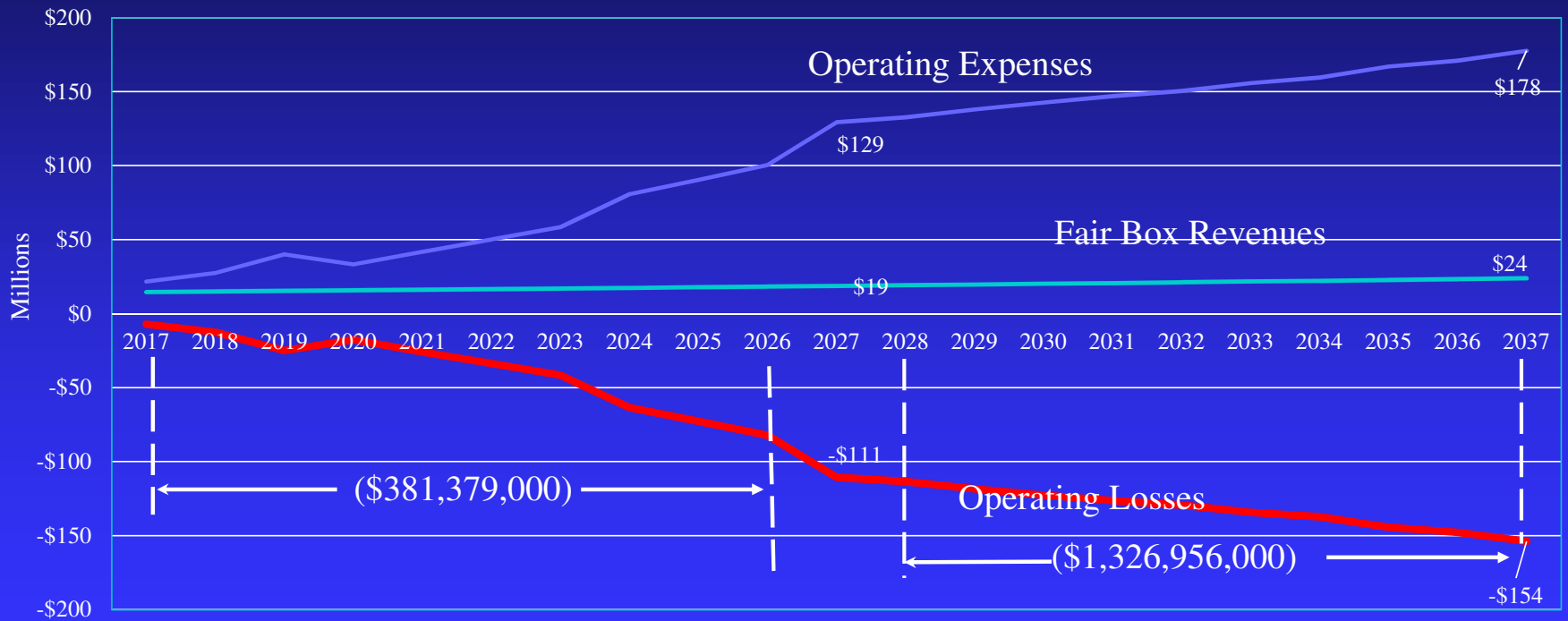
“Excellent” Consultant’s Report

- Clear marching orders were to produce IMPLEMENTATION plan –not assess NEEDS.
- Questionable data and conclusions.
- Provides Commissioners political cover for pre-made decisions.

Evaluating a Project Plan

- How is success defined?
- How can it be measured?
- Is RISK managed effectively?
 - ◆ Forecast risk!
 - ◆ Financial risk!
 - ◆ Technical risk!

Operating Losses Total over \$1.8 Billion



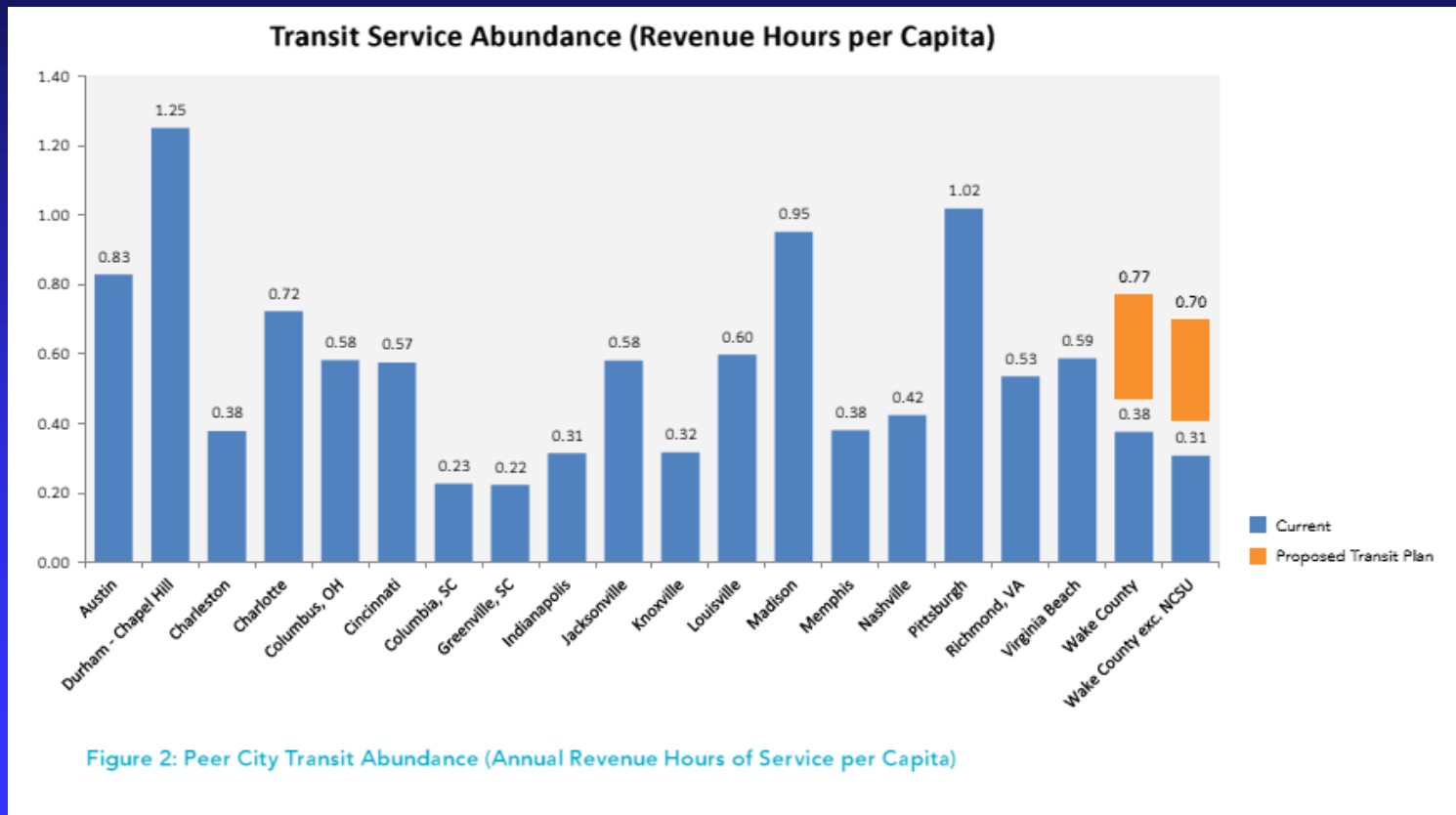
Summary Conclusions

- \$5.1 Billion “invested”
- “Investment” funds rely on speculative tax increase and fed & state grants
- \$1.8 Billion operating loss over plan period
- Infrastructure “investments” will impede traffic flow
- Raleigh & Cary taxpayers will subsidize bus service in Apex, Garner, Wake Forest etc.

Dictionary.com “investment”

the investing of money or capital in ***ORDER TO GAIN PROFITABLE RETURNS***, as interest, income, or appreciation in value.

Poor Statistical Comparisons



Service Correlated with Pop Density

Transit Service Abundance (Revenue Hours per Capita)

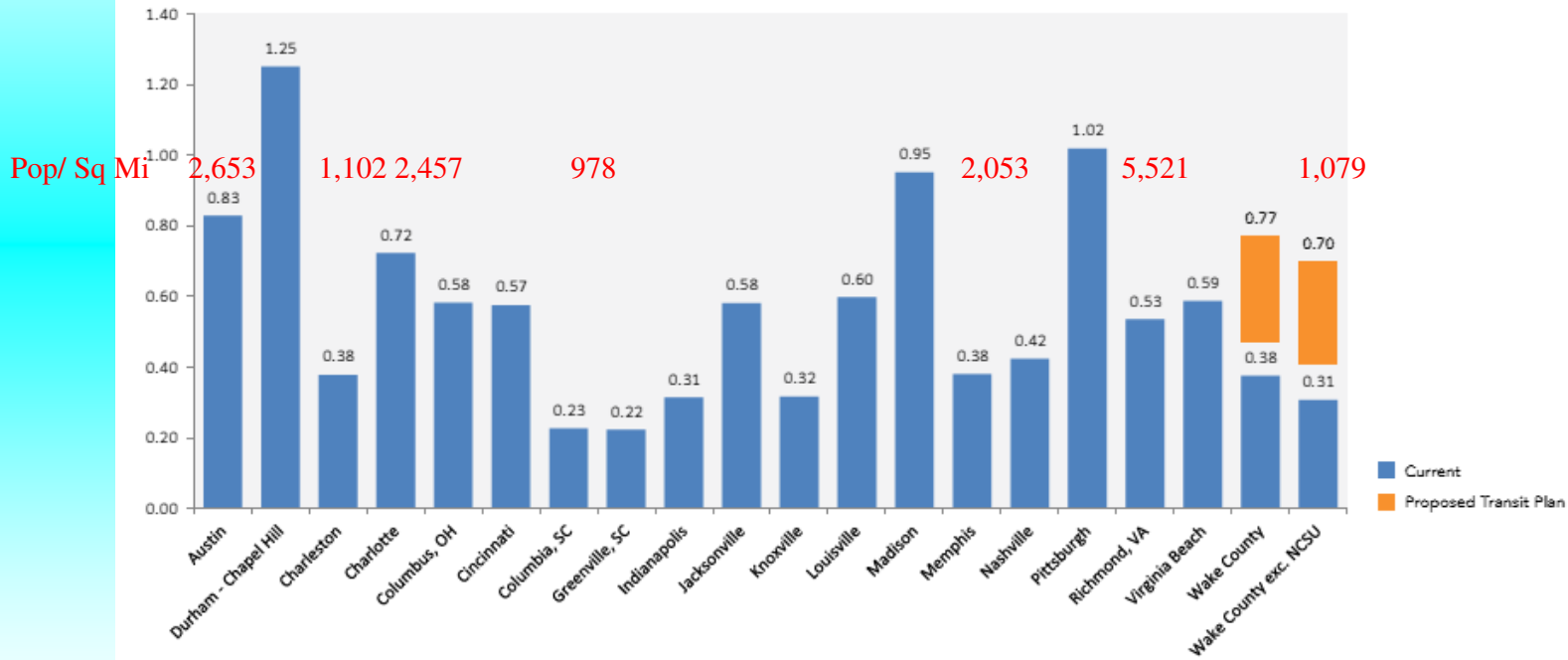
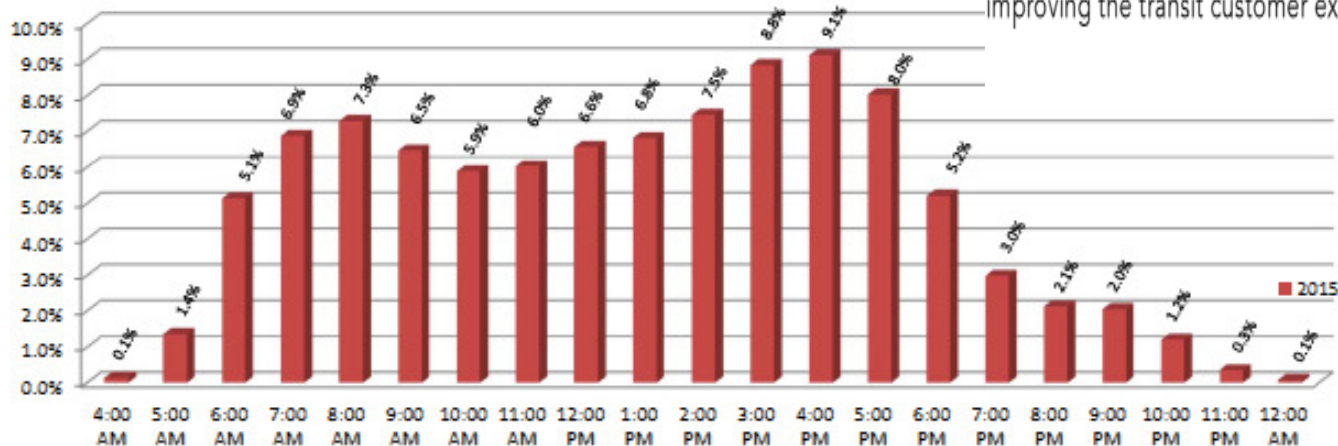


Figure 2: Peer City Transit Abundance (Annual Revenue Hours of Service per Capita)

Low Evening Service Demand

**Ridership Percentage by Time Period
FY16
November**



County. This will be accomplished by tripling of bus service in Wake County, investing in commuter rail and bus rapid transit infrastructure to enhance speed and reliability for transit customers, and focusing on improving the transit customer experience.

Changes in Bus Service

Key Investments:

- 3x bus service
- Increased hours of service across the network
- Increased Saturday and Sunday Service
- Matching funds for community-based transit services

Key Benefits — Hours and Days of Operations Increases

Today	Proposed with Transit Plan
Some routes don't operate on Saturday and Sunday	All local routes operate 7 days a week
Many routes stop operating at 6:00 PM	Hours of operation extend until midnight or later
Many routes provide infrequent service through midday	Local routes maintain frequency through midday

Increasing Service During Low Demand Hours

- All-day Frequent Network (service every 15 minutes or better all day, running late into the evening and all weekends) following development patterns that provide an abundant market. These patterns tend to feature:

Coverage services do not anticipate high ridership, but exist to ensure that all communities are served. Because only 30% of plan resources are devoted to coverage service, the Transit Plan is careful to apportion this service equitably as well as to meet the greatest need. To this end, the plan provides:

- Links from the outer towns not served by other service (all but Raleigh, Cary, Morrisville, and Garner) into the Raleigh-Cary core.
- Lower frequency routes retaining current coverage to lower density parts of Raleigh and Cary (using in part City of Raleigh and Town of Cary funds already devoted to this purpose).
- A match program for towns other than Raleigh and Cary. Under this program, the plan sets sufficient funds to provide half the cost of a local bus service in each town with participating towns paying the other half. Each local government will be free to pursue the program or not.

GoRaleigh - Transit Division
Route Statistics
Fiscal Year 16
November-15

	ROUTE NUMBER/NAME	TOTAL PASSENGERS			TOTAL REVENUE	PASSENGERS PER REVENUE HOUR			FAREBOX RECOVERY
		MONTH	PRIOR MONTH	PRIOR YEAR		WEEKDAY	SATURDAY	SUNDAY	
1	CAPITAL	59,016	67,191	62,293	42,128	34	47	49	32.3%
2	FALLS OF NEUSE	25,514	29,660	23,643	17,996	23	20	20	20.9%
3	GLASCOCK	5,663	6,185	6,914	3,698	15	13	-	15.4%
4	REX HOSPITAL	21,752	24,661	23,405	15,642	17	16	13	14.7%
5	BILTMORE HILLS	17,645	20,447	18,480	12,099	38	36	30	31.5%
6	CRABTREE	20,690	22,744	21,167	14,888	24	26	23	24.9%
7	SOUTH SAUNDERS	31,794	36,735	31,464	22,049	30	37	21	29.5%
7L	CAROLINA PINES	11,380	12,926	11,391	7,761	20	22	-	15.4%
8	SIX FORKS	12,075	14,194	13,585	8,311	16	10	9	11.9%
10	LONGVIEW	6,247	7,184	7,737	4,374	16	15	-	20.3%
11	AVENT FERRY	21,245	24,781	21,675	15,853	28	29	36	30.0%
11L	BUCK JONES	7,925	10,032	6,780	5,884	19	24	-	16.7%
12	METHOD	18,860	22,106	17,544	13,323	26	26	31	32.5%
13	CHAVIS HEIGHTS	5,953	7,088	7,644	3,835	19	12	-	24.8%
15	WAKEMED	48,383	57,567	47,152	34,264	37	41	38	38.4%
15L	TRAWICK	5,182	6,078	7,052	3,681	13	11	-	10.1%
16	OBERLIN	11,110	12,505	10,782	7,802	19	21	-	16.1%
18	WORTHDALE	13,811	16,258	16,209	9,528	24	18	12	25.9%
19	APOLLO HEIGHTS	14,666	17,080	14,346	10,089	24	18	16	23.0%

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54L	SPRING FOREST ROAD	2,126	2,240	2,359	1,500	7	5	-	5.0% *
55X	POOLE ROAD EXPRESS	296	366	729	225	6	1	2	3.1% *B
70X	BRIER CREEK EXPRESS	2,456	2,695	2,654	1,827	13	17	-	7.9% *
		416,633	483,838	434,885	\$ 282,569	593	566	332	21.2%
40X	WAKE TECH EXPRESS	5,944	7,348	7,784	884	15	-	-	1.7%
62	WAKE FOREST LOOP	2,558	2,849	2,215	-	10	-	-	0.0%
		8,502	10,197	9,999	884	24	-	-	1.1%
60X	WAKE FOREST EXPRESS	1,138	1,442	1,819	846	7	-	-	3.1%
63X	KNIGHTDALE EXPRESS	648	831	1,057	486	6	-	-	3.1%
64X	ZEBULON / WENDELL EXPRESS	1,343	1,777	1,874	1,020	10	-	-	3.7%
76X	JOHNSTON COUNTY EXPRESS	859	1,066	651	661	3	-	-	1.5% *C
77X	CLAYTON EXPRESS	779	842	-	596	3	-	-	1.6% *C
78X	FUQUAY VARINA EXPRESS	1,389	1,340	-	1,005	5	-	-	1.9% *C
102	GARNER	1,122	1,402	-	834	4	-	-	5.8%
		7,278	8,700	5,401	5,446	37	-	-	2.5%
	NC STATE FAIR	-	75,446	-	-				
	SPECIAL TRANSIT	-	-	-	260,787				
	OTHER	-	-	-	145				
		432,413	578,181	450,285	\$ 549,832	655	566	332	

BRT encompasses a wide range of tools that can help keep buses on schedule. The most intensive form of BRT provides dedicated lanes for buses. Other interventions might include:

- Modifications at intersections that allow buses to bypass traffic stopped at signals.
- Signal timing adjustments that give a small advantage to a bus when it is present, an advantage often undetectable by motorists.
- Station-like stops with tools to speed boarding such as ticket machines that allow customers to pay before they board. Some of these stations also provide easier boarding for wheelchairs and other mobility devices.

The Transit Plan envisions that these tools would be deployed along the following corridors, at minimum:

- Western Boulevard between Raleigh and Cary;
- On or near Capital Boulevard between Peace Street and the intersection with Wake Forest Road (this short segment would be used by several converging bus routes from the north)
- Along New Bern Avenue between Raleigh Boulevard and WakeMed
- Along South Wilmington Street between Raleigh and Garner at US 401

In each case, the mix of tools to be used would be based on a segment-by-segment analysis of each street, with the goal of achieving the greatest possible reduction in bus delay at the lowest cost. Where large numbers of boarding passengers are expected, stations or stops would be designed to increase the safety and comfort of waiting passengers.

Dedicated Bus Lanes Impact Vehicular Flow



Capital & Operating Costs (000)

Capital Funded Through 2027 (with Federal, State, Local Support)*

	\$ (thousands)
Commuter Rail	\$886,500
Bus Rapid Transit	\$347,000
Bus Acquisition	\$114,700
Bus Infrastructure	\$208,400
Other Capital Projects	\$24,500
Future Projects	\$35,000
Total	\$1,616,100

Figure 26: Capitol Cost Summary

* Capital costs reflect 2015 estimates inflated to year of expenditure by 4% each year

Local Service Operating Costs in 2027 **

	\$ (thousands)
Local Bus Network	\$85,300
BRT	\$14,500
Commuter Rail	\$20,100
Other Bus Operations	\$7,100
Maintenance and Operations	\$2,300
Total	\$129,337

Local Service Operating Costs in 2027	
Total LOCAL Service Operating Costs	\$129,337,000
20% Fair box Recovery	25,867,000
Operating LOSS	\$103,470,000

Farebox Revenue

Farebox revenue varies by type of service. For local bus service, including BRT, a 24% farebox recovery ratio was used for ridership routes, 10% for coverage routes, 3% for intertown routes, and 0% for local service match. Ridership estimates will be refined for commuter rail during future studies. The current plan assumes farebox revenue of 20% of operating expenses.

2017-2027 Operating Loss (Expenses – Fairbox Recovery)	\$1,841,457,000
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Sources of Funding

1/2¢ Sales Tax Increase	\$2,359,238,000
\$3 Increase Regional Car Registration	\$62,185,000
\$7 Wake Car Registration	\$145,099,000
Portion of Regional Rental Car Tax Avail for Wake Transit	\$92,786,000
Federal Funds	\$882,145,000
State Funds	\$53,390,000
Long Term Bond Proceeds	\$721,749,000
Short-Term Debt Principal	\$0
Excess Capital Projects Fund (Inflows) and Outflows	\$789,000
Existing Local Revenues for Bus Operations	\$396,724,000
Existing State Support for Bus Operations	\$25,200,000
Farebox Revenue	\$374,258,000
Total	\$5,113,563,000

Local Revenues

- Half-cent local sales tax
- New \$7 county vehicle registration fee
- Increase from \$5 to \$8 regional vehicle registration fee
- Existing 5% vehicle rental tax
- Fare box revenue

Optimistic Plan over \$5 billion

20-Year Expenditure Summary

Recommended Wake County Transit Plan 2017 - 2037*		
BRT Capital and Operations, Enhanced Bus Network Operations, Bus Acquisition and Bus Infrastructure	\$2,949,773	58%
Commuter Rail Capital and Operations	1,582,549	31%
Future Capital Projects and Operating	459,193	9%
Fund Balance Allocation	122,046	2%
Total	\$5,113,561	100%

Figure 31: Local Service Operating Costs in 2027

* Allocation includes debt service

Uses of Funds

<i>BRT Capital Expenditures</i>	<i>\$347,008,000</i>
<i>Commuter Rail Capital Expenditures</i>	<i>\$886,607,000</i>
<i>Other Capital Expenditures</i>	<i>\$827,548,000</i>
<i>Debt Service & Debt Service Reserve Fund</i>	<i>\$714,635,000</i>
<i>Operating Fund Balance Allocation</i>	<i>\$41,395,000</i>
<i>Capital Fund Balance Allocation</i>	<i>\$80,651,000</i>
<i>Operating Expenses</i>	<i>\$2,215,714,000</i>
<i>Total Expenses</i>	<i>\$5,113,561,000</i>

\$5.92 Expenses for each Revenue \$

Operating Expenses	\$2,215,714,000
Fair box Revenue	\$374,258,000

Summary Conclusions

- \$5.1 Billion “invested”
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- \$1.8 Billion operating loss over plan period
- Infrastructure “investments” will impede traffic flow
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