

The background of the slide is a dark, out-of-focus photograph of city lights at night. The lights appear as soft, glowing circles of various colors, including white, yellow, orange, and red, scattered across the dark blue and black background. The overall effect is a bokeh or 'light painting' style.

Fort Collins Traffic Data

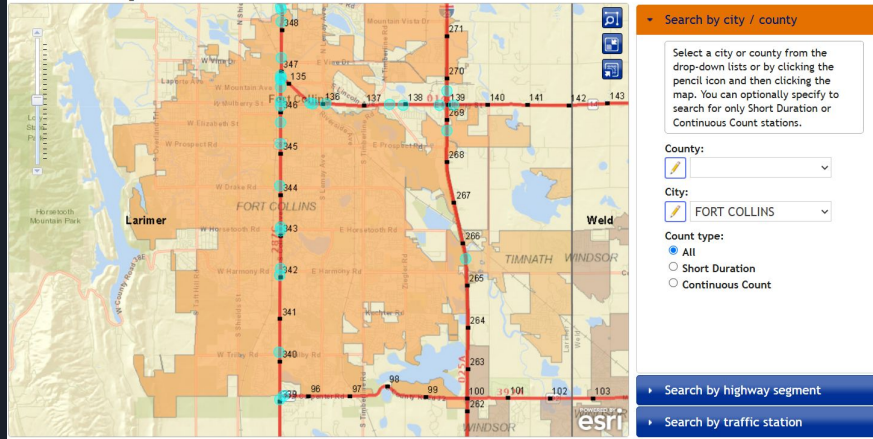
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Alex Firth,
Nathan Seto

Meta Information about the data.

Online Transportation and Information Data is an online database with information from the Colorado Department of Transportation.

The data is collected from “traffic stations” across the state where the amount of cars that travel through the “station” is measured.

Traffic Data Explorer



Stations

AADT

Future Traffic

ESAL

Found 0 Short Duration stations and 2 Continuous Count stations. Click the magnifying glass icon in front of a station to see count data below.

Export to Excel

Select	Station ID	Route	Start	End	County	City	Description
	000508	014C	137.619	138.749	Larimer	Fort Collins	ON SH 14, MULBERRY ST E/O SUMMIT VIEW DR, FT COLLINS
	000127	025A	271.373	277.884	Larimer	Fort Collins	ON I-25 N/O MOUNTAIN VISTA INTERCHANGE, FORT COLLINS

ON I-25 N/O MOUNTAIN VISTA INTERCHANGE, FORT COLLINS (Station Id: 000127)

Daily

Monthly Summaries

Annual

Export to Excel

Yr	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
2025	26,957	28,623										
2024	26,168	27,477	29,744	29,996	32,997	35,407	38,875	36,381	33,550	32,153	29,843	31,088
2023	25,253	27,074	28,324	29,405	33,218	36,195	39,810	36,133	34,655	31,045	29,233	28,477
2022	25,272	26,717	28,553	29,715	32,076	35,054	37,593	36,026	33,830	32,282	29,024	27,549
2021	25,205	24,915	28,585	30,082	32,728	36,942	38,949	35,616	33,470	31,525	29,798	27,635
2020	27,846	27,091	23,951	18,284	25,711	31,685	33,307	33,160	31,896	30,180	26,297	25,409
2019	28,770	28,651	30,959	31,303	32,470	35,073	38,468	36,482	33,984	32,314	29,038	28,750
2018	28,368	28,130	31,092	32,907	35,280	38,235	40,860	38,826	36,472	34,226	31,841	30,498
2017	24,728	27,138	30,245	29,548	34,258	37,604	40,109	39,577	34,587	32,807	31,038	29,174
2016	25,921	26,500	27,564	28,445	32,442	35,471	36,593	32,709	32,957	31,356	29,317	27,530

Note: the CDOT does not state what the traffic stations are but our best guess is the traffic cameras on lights

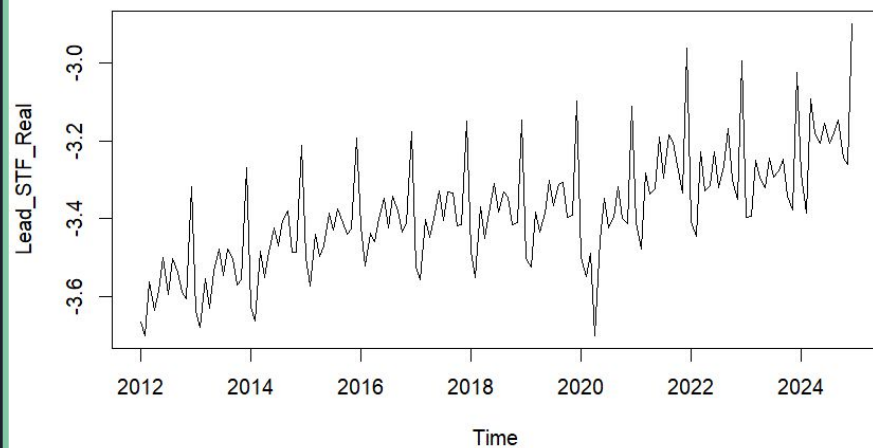
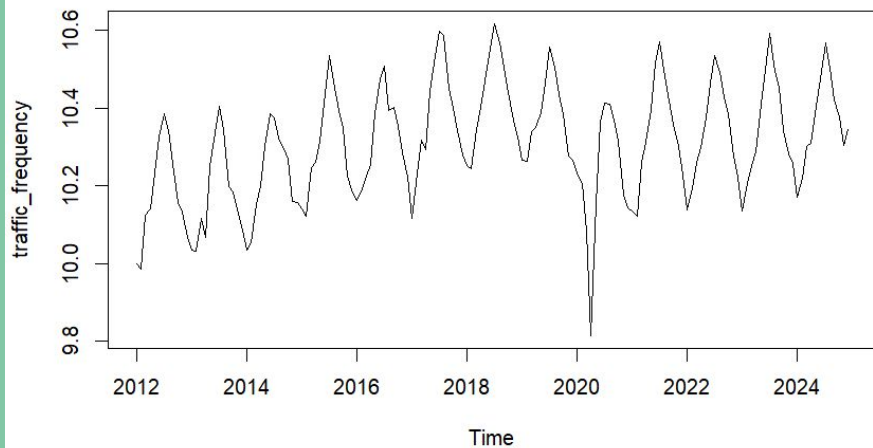


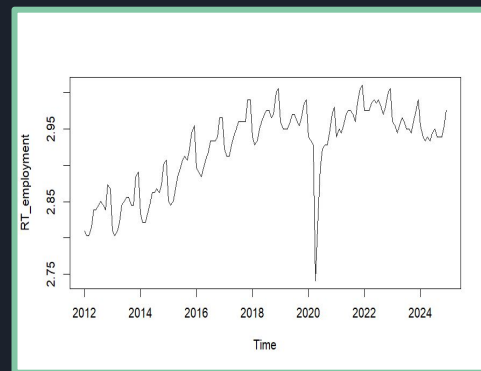
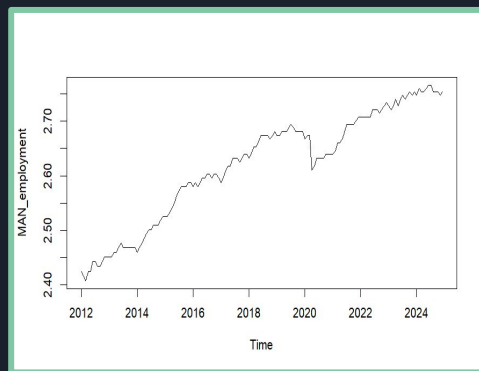
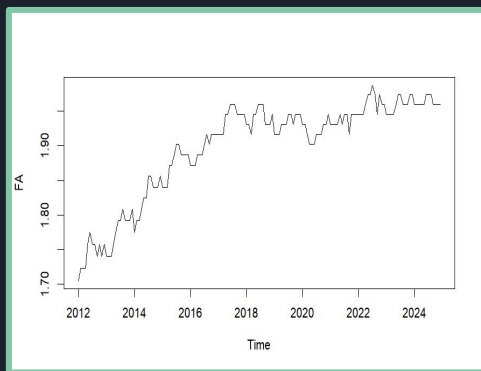
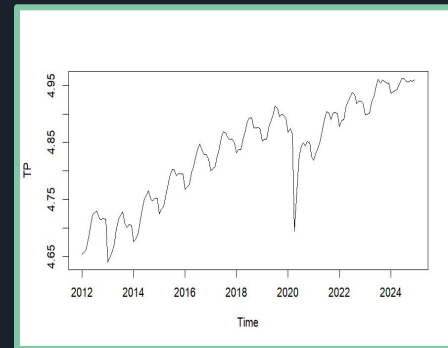
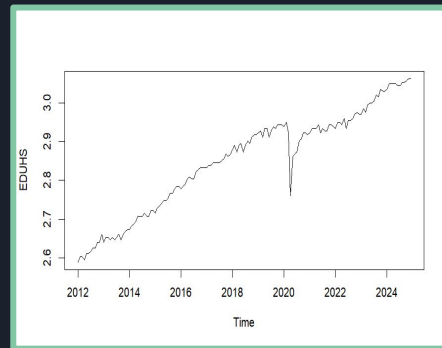
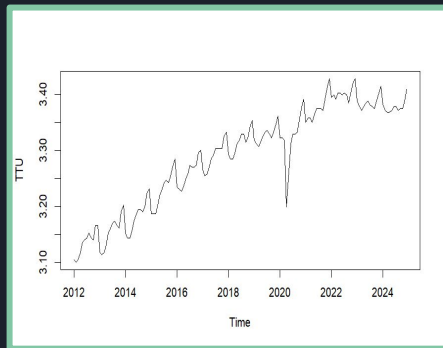
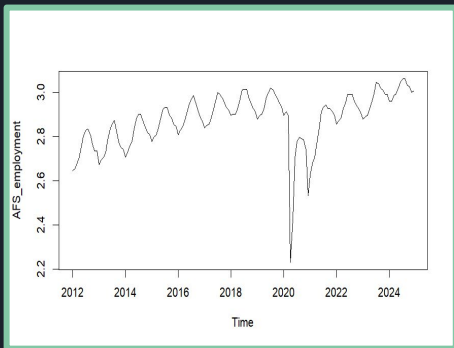
Why we considered this data

This data is typically used for transportation planning and project development, however we believe that this data can help determine “foot traffic” in fort collins which could be used to determine the amount of consumers traveling through

Even if the data doesn't perfectly correlate with the sales in the city this data could also help determine the general economic welfare of a city, more cars traveling through could mean: more jobs, more travel, more growth, etc.

Plotted Data





Johansen Procedure

Values of teststatistic and critical values of test:

	test	10pct	5pct	1pct
$r \leq 8$	1.40	6.50	8.18	11.65
$r \leq 7$	8.81	12.91	14.90	19.19
$r \leq 6$	19.93	18.90	21.07	25.75
$r \leq 5$	32.15	24.78	27.14	32.14
$r \leq 4$	75.33	30.84	33.32	38.78
$r \leq 3$	89.60	36.25	39.43	44.59
$r \leq 2$	119.26	42.06	44.91	51.30
$r \leq 1$	147.62	48.43	51.07	57.07
$r = 0$	209.13	54.01	57.00	63.37



Coefficients

	[,1]	[,2]	[,3]	[,4]	[,5]	[,6]
TP.l12	1.000	0.000	0.000	0.000	0.000	0.000
EDUHS.l12	0.000	1.000	0.000	0.000	0.000	0.000
TTU.l12	0.000	0.000	1.000	0.000	0.000	0.000
FA.l12	0.000	0.000	0.000	1.000	0.000	0.000
MAN_employment.l12	0.000	0.000	0.000	0.000	1.000	0.000
AFS_employment.l12	0.000	0.000	0.000	0.000	0.000	1.000
RT_employment.l12	-7.208	-13.366	-6.671	-6.516	-9.801	5.351
traffic_frequency.l12	1.231	2.497	1.472	1.099	1.867	-2.321
Lead_STF_Real.l12	1.293	2.652	1.038	1.240	1.813	-1.502

Dickey-Fuller

ECT_1	ECT_2	ECT_3	ECT_4	ECT_5	ECT_6
0.01	0.01	0.01	0.01	0.01	0.01

Warning: p-value smaller than printed p-value
Augmented Dickey-Fuller Test

data: ECT_df[[vec]]
Dickey-Fuller = -4.2946, Lag order = 5, p-value = 0.01
alternative hypothesis: stationary

Warning: p-value smaller than printed p-value
Augmented Dickey-Fuller Test

data: ECT_df[[vec]]
Dickey-Fuller = -4.4613, Lag order = 5, p-value = 0.01
alternative hypothesis: stationary

Warning: p-value smaller than printed p-value
Augmented Dickey-Fuller Test

data: ECT_df[[vec]]
Dickey-Fuller = -5.3352, Lag order = 5, p-value = 0.01
alternative hypothesis: stationary

Warning: p-value smaller than printed p-value
Augmented Dickey-Fuller Test

data: ECT_df[[vec]]
Dickey-Fuller = -4.6844, Lag order = 5, p-value = 0.01
alternative hypothesis: stationary

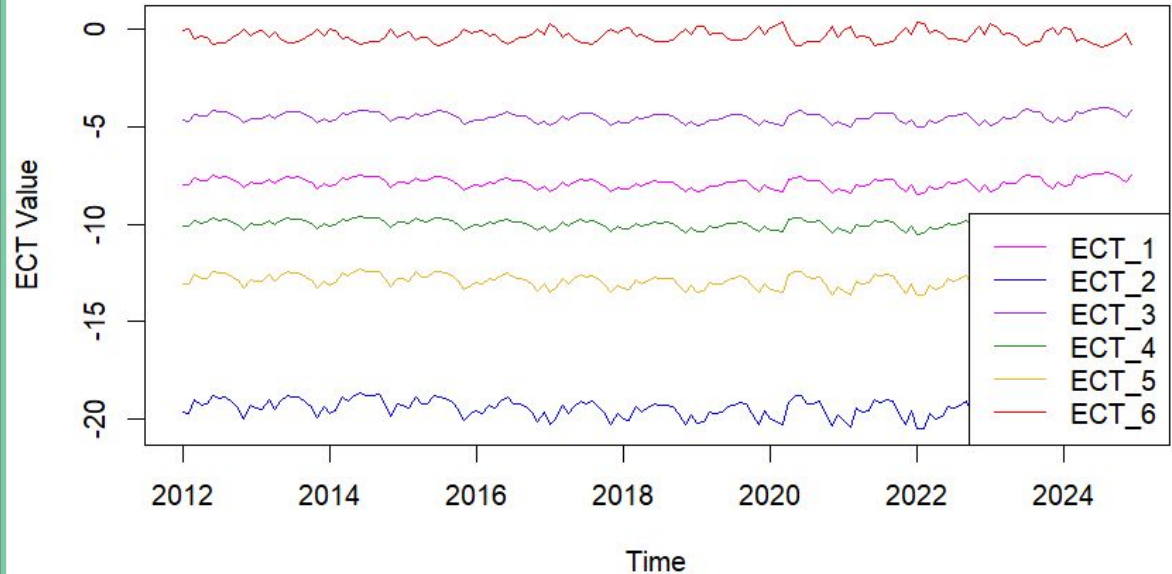
Warning: p-value smaller than printed p-value
Augmented Dickey-Fuller Test

data: ECT_df[[vec]]
Dickey-Fuller = -4.6124, Lag order = 5, p-value = 0.01
alternative hypothesis: stationary

Warning: p-value smaller than printed p-value
Augmented Dickey-Fuller Test

data: ECT_df[[vec]]
Dickey-Fuller = -8.067, Lag order = 5, p-value = 0.01
alternative hypothesis: stationary

Error Correction Terms





Findings

According to all of the information previously discussed we can see evidence in favor of cointegration between the data.