Transportation Revenue Forecast Council June 2023 Transportation Economic and Revenue Forecasts

Volume III: Alternate Forecast Tables

Transportation Revenue Forecast Council Alternative Forecasts June 2023

•	Alternative Fei	ry ForecastI	III-3
---	-----------------	--------------	-------

REVENUE AND RIDERSHIP PROJECTIONS JUNE 2023 FORECAST FISCAL YEARS 2023-2033

Prepared for Washington State Ferries

for Presentation to the

Transportation Revenue Forecast Council

Prepared by WSP USA

June 23, 2023

Note: The COVID-19 pandemic materially disrupted normal ferry ridership patterns and has led to ongoing staffing shortages which have resulted in service disruptions on some routes. The duration and magnitude of these combined effects and how they will continue to impact ferry ridership, while becoming more apparent, remain uncertain. As such, the June 2023 Forecast projections, as well as the assumptions upon which they are based at the time of preparation, remain subject to an above normal level of risk and uncertainty, which may cause actual results to vary considerably from projections.





June 2023 Revenue and Ridership Forecasts — Fiscal Years 2023-2033

JUNE 2023 FORECAST NOTES

The fare revenue and ridership projections for Washington State Ferries (WSF) are prepared using a combination of systemwide econometric, time series, and spreadsheet models to forecast monthly ridership and revenue across 10 routes and seven fare categories through fiscal year (FY) 2033.

The seven fare categories include: (1) passenger full fares, (2) passenger commuter discount fares, (3) passenger other discount fares, (4) auto/driver full fares, (5) auto commuter discount fares, (6) other discount vehicles, and (7) oversize vehicle fares.

Beginning in early March 2020, the COVID-19 pandemic negatively impacted ferry travel, with April 2020 ridership 73% lower than 2019. Ridership has been somewhat erratically rebounding since then, with COVID-19 virus cycles combined with reduced service levels due to ongoing staffing challenges, extending the recovery.

Since 2000, passenger and vehicle/driver commuter discounted fare ridership has been declining in absolute volumes and in shares of total passengers and vehicles. Contributing factors include an aging population in ferry-served communities, telecommuting, changes in the frequent-user multi-ride fare media, and most recently, the pandemic. In recognition of enduring telecommuting trends and lack of rebound in passenger commuter fare ridership, the forecast models for multi-ride fare categories have been continuously refined to capture how the pandemic has resulted in sustained changes to travel patterns.

The June 2023 Forecast assumes a more gradual recovery of pandemic staffing-related service reductions for some routes. Routes still in the process of service restoration include the Fauntleroy-Vashon-Southworth triangle route (full restoration targeting Spring 2024), the Seattle-Bremerton route (full restoration targeting Summer 2024), and the Anacortes-Sidney, B.C. route. The latter is assumed to restart operation in summer 2030, with demand then ramping up over three years.

The June 2023 Forecast incorporates the latest fares adopted by the Washington State Transportation Commission (WSTC), including the elimination of youth passenger fares effective October 1, 2022, with the following assumptions.

- Baseline Forecast Includes the two adopted 2.5% fare increases with nickel rounding that took place on October 1 in 2021 and 2022, and the elimination of youth fares on October 1, 2022, after which no further changes are assumed.
- Alternative 1 Forecast Adds 4.25% annual increases plus nickel rounding to the Baseline Forecast on October 1, 2023 (FY 2024) and October 1, 2024 (FY2025), while simultaneously including a temporary 1% discount to multi-ride passes. Thereafter, the forecast assumes 2.5% increases each October 1 through 2032 (FY 2033), with the additional 1% multi-ride pass discount eliminated.

FY 2023 projections include actual revenue and ridership through May 2023.

Ridership Impacts

- The June 2023 Forecast incorporates the latest demographic and economic variable projections. COVID-19 indicator variables were tailored for most fare category models to capture pandemic effects not associated with other factors.
- The forecast period projections for real personal income were revised slightly downward for the forecast horizon, dampening ridership projections.
- Population within ferry-served communities continues to age. Working age population indices have been revised increasingly downward over the forecast horizon, dampening demand for passenger and vehicle/driver multi-ride fare media. The age 65+ population indices have been revised increasingly upwards, strengthening demand for vehicle other discounted fare ridership.
- The inflation projections are slightly higher across the forecast horizon, resulting in relatively lower real fares that contribute to slight growth in ridership demand.
- Real gasoline prices have been revised modestly lower through the forecast horizon, bolstering vehicle/driver demand.
- Actual ridership for the most recent three months (March-May 2023) averaged about 6.7% lower than previously forecasted.

Fare and Surcharge Revenue Impacts

- Actual revenue collections for March-May 2023 averaged about 5.5% lower than previously forecasted.
- For the Baseline and Alternative 1 Forecasts, revenues for the 2021-23 biennium are projected to be \$341.0 M, or \$3.4 million (1.0%) less than the March Forecast, with \$329.0 M in base fare revenues and \$12.0 M in surcharges.
- For the 2023-25 biennium, the Baseline Forecast of revenues is \$394.7 M, which is \$9.4 M (2.3%) lower than in March. The Baseline Forecast comprises \$381.1 M in base fare revenues and \$13.6 M in surcharges.
- For the 2023-25 biennium, the Alternative 1 Forecast of revenues is \$409.9 M, which is \$3.2 M (0.8%) lower than the prior March value and comprises \$396.5 M in base fare revenues and \$13.4 M in surcharges.
- The 10/1/2022 elimination of youth fares is expected to reduce 2021-23 biennium revenue by \$2.5 M. For the 2023-25 biennium, the expected revenue reduction is nearly \$8.1 M under both the Baseline and Alternative 1 Forecasts.
- For remainder of the horizon (FYs 2026-33), projected revenues for the Baseline Forecast have been revised downward between 1.0% and 2.3%. In contrast, higher assumed fare increases under the Alternative 1 Forecast for June yield revenues that range 0.8% to 1.6% higher than the prior forecast.



REVENUE PROJECTIONS | JUNE 2023 BASELINE FORECAST

2.5% Adopted Fare Increases on October 1, 2021 & 2022 | No Further Fare Increases¹ Fiscal Years 2023-2033

	June 2023	Fiscal Year		June	vs. March Foreca	st	March 2023 Baseline		
Fiscal Year	Capacity- Constrained Revenue Forecast	Annual Rate of Change	June Biennium Total	% Change by Fiscal Year	\$ Change and % Change by Biennium		Capacity- Constrained Revenue Forecast	Biennium Total	
2014	\$167,441,867	3.3%							
2015	\$175,965,750	5.1%	\$343,407,617						
2016	\$181,444,863	3.1%							
2017	\$186,973,746	3.0%	\$368,418,609						
2018	\$192,827,951	3.1%							
2019	\$195,268,522	1.3%	\$388,096,473						
2020	\$166,825,103	(14.6%)							
2021	\$155,668,672	(6.7%)	\$322,493,775						
2022	\$167,212,380	7.4%							
2023 ²	\$173,780,000	3.9%	\$340,992,380	(1.9%)	(\$3,389,000)	(1.0%)	\$177,169,000	\$344,381,380	
2024	\$193,487,000	11.3%		(3.3%)			\$200,163,000		
2025	\$201,171,000	4.0%	\$394,658,000	(1.3%)	(\$9,378,000)	(2.3%)	\$203,873,000	\$404,036,000	
2026	\$204,995,000	1.9%		(1.0%)			\$207,128,000		
2027	\$208,161,000	1.5%	\$413,156,000	(1.1%)	(\$4,512,000)	(1.1%)	\$210,540,000	\$417,668,000	
2028	\$210,357,000	1.1%		(1.3%)			\$213,170,000		
2029	\$212,303,000	0.9%	\$422,660,000	(1.5%)	(\$6,040,000)	(1.4%)	\$215,530,000	\$428,700,000	
2030	\$214,005,000	0.8%		(1.6%)			\$217,486,000		
2031	\$217,758,000	1.8%	\$431,763,000	(1.8%)	(\$7,554,000)	(1.7%)	\$221,831,000	\$439,317,000	
2032	\$219,673,000	0.9%		(2.1%)			\$224,475,000		
2033	\$221,848,000	1.0%	\$441,521,000	(2.3%)	(\$10,107,000)	(2.2%)	\$227,153,000	\$451,628,000	

¹ The Baseline Forecast includes a 2.5% fare increase on October 1, 2021 (FY 2022) and another 2.5% fare increase plus the elimination of youth passenger fares on October 1, 2022 (FY 2023). The Baseline Forecast excludes any further changes to the current base fares, resulting in declining real fares beyond FY 2023.

² FY 2023 includes actual revenue data through May 2023. Light green shaded values denote historical annual data.



The Baseline Forecast also reflects the current programmed level of service, including the latest post-pandemic service restoration plan.

REVENUE PROJECTIONS | JUNE 2023 BASELINE FORECAST

2.5% Adopted Fare Increases on October 1, 2021 & 2022 | No Further Fare Increases¹ Fiscal Years 2023-2033

	June 2023			Distribut	ion of Revenue t	o Operating and C	Capital Programs	
Fiscal Year	Capacity- Constrained Revenue Forecast	June Biennium Total	25¢ Capital Surcharge Revenue	25¢ Vessel Surcharge Revenue	Total Surcharge Revenue	Biennium Totals for Capital	Base Fare Revenue for Operations	Biennium Totals for Operations
2014	\$167,441,867		\$3,662,690		\$3,662,690		\$163,779,177	
2015	\$175,965,750	\$343,407,617	\$3,894,088		\$3,894,088	\$7,556,778	\$172,071,662	\$335,850,839
2016	\$181,444,863		\$4,007,848		\$4,007,848		\$177,437,015	
2017	\$186,973,746	\$368,418,609	\$4,022,681		\$4,022,681	\$8,030,529	\$182,951,065	\$360,388,080
2018	\$192,827,951		\$4,084,581		\$4,084,581		\$188,743,370	
2019	\$195,268,522	\$388,096,473	\$3,987,656		\$3,987,656	\$8,072,237	\$191,280,866	\$380,024,236
2020	\$166,825,103		\$3,304,324	\$378,136	\$3,682,460		\$163,142,643	
2021	\$155,668,672	\$322,493,775	\$2,737,730	\$2,726,447	\$5,464,177	\$9,146,637	\$150,204,495	\$313,347,138
2022	\$167,212,380		\$2,966,726	\$2,952,832	\$5,919,557		\$161,292,380	
2023 ²	\$173,780,000	\$340,992,380	\$3,030,000	\$3,029,000	\$6,059,000	\$11,979,000	\$167,721,000	\$329,013,380
2024	\$193,487,000		\$3,313,000	\$3,312,000	\$6,625,000		\$186,862,000	
2025	\$201,171,000	\$394,658,000	\$3,470,000	\$3,469,000	\$6,939,000	\$13,564,000	\$194,232,000	\$381,094,000
2026	\$204,995,000		\$3,549,000	\$3,549,000	\$7,098,000		\$197,897,000	
2027	\$208,161,000	\$413,156,000	\$3,613,000	\$3,613,000	\$7,226,000	\$14,324,000	\$200,935,000	\$398,832,000
2028	\$210,357,000		\$3,652,000	\$3,652,000	\$7,304,000		\$203,053,000	
2029	\$212,303,000	\$422,660,000	\$3,687,000	\$3,687,000	\$7,374,000	\$14,678,000	\$204,929,000	\$407,982,000
2030	\$214,005,000		\$3,718,000	\$3,717,000	\$7,435,000		\$206,570,000	
2031	\$217,758,000	\$431,763,000	\$3,755,000	\$3,754,000	\$7,509,000	\$14,944,000	\$210,249,000	\$416,819,000
2032	\$219,673,000		\$3,782,000	\$3,782,000	\$7,564,000		\$212,109,000	
2033	\$221,848,000	\$441,521,000	\$3,811,000	\$3,811,000	\$7,622,000	\$15,186,000	\$214,226,000	\$426,335,000

¹ The Baseline Forecast includes a 2.5% fare increase on October 1, 2021 (FY 2022) and another 2.5% fare increase plus the elimination of youth passenger fares on October 1, 2022 (FY 2023). The Baseline Forecast excludes any further changes to the current base fares, resulting in declining real fares beyond FY 2023.

² FY 2023 includes actual revenue data through May 2023. Light green shaded values denote historical annual data.



The Baseline Forecast also reflects the current programmed level of service, including the latest post-pandemic service restoration plan.

REVENUE PROJECTIONS | JUNE 2023 ALTERNATIVE 1 FORECAST

4.25% Fare Increases on October 1, 2023 & 2024 | 2.5% Fare Increases each October thereafter (FYs 2026-33)¹ Fiscal Years 2023-2033

	June 2023	Fiscal Year		June	vs. March Foreca	st	March 2023 Alternative 1	
Fiscal Year	Capacity- Constrained Revenue Forecast	onstrained Rate of Biennium % Change by \$ Change		•	\$ Change and Capacity- hange by Biennium Revenue Forecas		Biennium Total	
2014	\$167,441,867	3.3%						
2015	\$175,965,750	5.1%	\$343,407,617					
2016	\$181,444,863	3.1%						
2017	\$186,973,746	3.0%	\$368,418,609					
2018	\$192,827,951	3.1%						
2019	\$195,268,522	1.3%	\$388,096,473					
2020	\$166,825,103	(14.6%)						
2021	\$155,668,672	(6.7%)	\$322,493,775					
2022	\$167,212,380	7.4%						
2023 ²	\$173,780,000	3.9%	\$340,992,380	(1.9%)	(\$3,389,000)	(1.0%)	\$177,169,000	\$344,381,380
2024	\$197,736,000	13.8%		(2.5%)			\$202,710,000	
2025	\$212,165,000	7.3%	\$409,901,000	0.8%	(\$3,203,000)	(0.8%)	\$210,394,000	\$413,104,000
2026	\$221,418,000	4.4%		1.7%			\$217,805,000	
2027	\$229,011,000	3.4%	\$450,429,000	1.5%	\$7,035,000	1.6%	\$225,589,000	\$443,394,000
2028	\$235,942,000	3.0%		1.4%			\$232,719,000	
2029	\$242,896,000	2.9%	\$478,838,000	1.3%	\$6,316,000	1.3%	\$239,803,000	\$472,522,000
2030	\$249,902,000	2.9%		1.2%			\$247,024,000	
2031	\$259,770,000	3.9%	\$509,672,000	1.0%	\$5,348,000	1.1%	\$257,300,000	\$504,324,000
2032	\$267,786,000	3.1%		0.8%			\$265,667,000	
2033	\$276,376,000	3.2%	\$544,162,000	0.7%	\$4,103,000	0.8%	\$274,392,000	\$540,059,000

¹ The Alternative 1 Forecast pairs 4.25% fare increasess on October 1, 2023 (FY 2024) and 2024 (FY 2025) with a temporary 1% additional discount on multi-ride (commuter) fares and then continues annual 2.5% fare increases each October thereafter, from October 1, 2025 (FY 2026) through October 1, 2032 (FY 2033).

The Alternative 1 Forecast reflects the current programmed level of service, including the latest post-pandemic service restoration plan.

² FY 2023 includes actual revenue data through May 2023. Light green shaded values denote historical annual data.



REVENUE PROJECTIONS | JUNE 2023 ALTERNATIVE 1 FORECAST

4.25% Fare Increases on October 1, 2023 & 2024 | 2.5% Fare Increases each October thereafter (FYs 2026-33)¹ Fiscal Years 2023-2033

	June 2023			Distribut	ion of Revenue t	o Operating and C	Capital Programs	
Fiscal Year	Capacity- Constrained Revenue Forecast	June Biennium Total	25¢ Capital Surcharge Revenue	25¢ Vessel Surcharge Revenue	Total Surcharge Revenue	Biennium Totals for Capital	Base Fare Revenue for Operations	Biennium Totals for Operations
2014	\$167,441,867		\$3,662,690		\$3,662,690		\$163,779,177	
2015	\$175,965,750	\$343,407,617	\$3,894,088		\$3,894,088	\$7,556,778	\$172,071,662	\$335,850,839
2016	\$181,444,863		\$4,007,848		\$4,007,848		\$177,437,015	
2017	\$186,973,746	\$368,418,609	\$4,022,681		\$4,022,681	\$8,030,529	\$182,951,065	\$360,388,080
2018	\$192,827,951		\$4,084,581		\$4,084,581		\$188,743,370	
2019	\$195,268,522	\$388,096,473	\$3,987,656		\$3,987,656	\$8,072,237	\$191,280,866	\$380,024,236
2020	\$166,825,103		\$3,304,324	\$378,136	\$3,682,460		\$163,142,643	
2021	\$155,668,672	\$322,493,775	\$2,737,730	\$2,726,447	\$5,464,177	\$9,146,637	\$150,204,495	\$313,347,138
2022	\$167,212,380		\$2,966,726	\$2,952,832	\$5,919,557		\$161,292,380	
2023 ²	\$173,780,000	\$340,992,380	\$3,030,000	\$3,029,000	\$6,059,000	\$11,979,000	\$167,721,000	\$329,013,380
2024	\$197,736,000		\$3,298,000	\$3,297,000	\$6,595,000		\$191,141,000	
2025	\$212,165,000	\$409,901,000	\$3,423,000	\$3,422,000	\$6,845,000	\$13,440,000	\$205,320,000	\$396,461,000
2026	\$221,418,000		\$3,474,000	\$3,473,000	\$6,947,000		\$214,471,000	
2027	\$229,011,000	\$450,429,000	\$3,517,000	\$3,516,000	\$7,033,000	\$13,980,000	\$221,978,000	\$436,449,000
2028	\$235,942,000		\$3,536,000	\$3,536,000	\$7,072,000		\$228,870,000	
2029	\$242,896,000	\$478,838,000	\$3,553,000	\$3,553,000	\$7,106,000	\$14,178,000	\$235,790,000	\$464,660,000
2030	\$249,902,000		\$3,571,000	\$3,570,000	\$7,141,000		\$242,761,000	
2031	\$259,770,000	\$509,672,000	\$3,598,000	\$3,598,000	\$7,196,000	\$14,337,000	\$252,574,000	\$495,335,000
2032	\$267,786,000		\$3,615,000	\$3,614,000	\$7,229,000		\$260,557,000	
2033	\$276,376,000	\$544,162,000	\$3,632,000	\$3,632,000	\$7,264,000	\$14,493,000	\$269,112,000	\$529,669,000

¹ The Alternative 1 Forecast pairs 4.25% fare increasess on October 1, 2023 (FY 2024) and 2024 (FY 2025) with a temporary 1% additional discount on multi-ride (commuter) fares and then continues annual 2.5% fare increases each October thereafter, from October 1, 2025 (FY 2026) through October 1, 2032 (FY 2033).
The Alternative 1 Forecast reflects the current programmed level of service, including the latest post-pandemic service restoration plan.

² FY 2023 includes actual revenue data through May 2023. Light green shaded values denote historical annual data.



Washington State Ferries — Revenue History and Forecast Trends

June 2023 Forecast - Fiscal Years 2014-2033



RIDERSHIP PROJECTIONS | JUNE 2023 BASELINE FORECAST

2.5% Adopted Fare Increases on October 1, 2021 & 2022 | No Further Fare Increases¹ Fiscal Years 2023-2033

	June 2023	Jι	ine 2023 Capacity Con	strained Projections		March 202	23 Baseline
Fiscal Year	Unconstrained Demand Forecast*	Passenger Ridership	Vehicle/Driver Ridership	Total Ridership	Annual Rate of Change	Total Ridership	June 2023 vs March
2014		12,696,936	10,154,905	22,851,841	2.0%		
2015		13,270,874	10,387,368	23,658,242	3.5%		
2016		13,523,385	10,559,240	24,082,625	1.8%		
2017		13,669,834	10,544,735	24,214,569	0.5%		
2018		13,856,444	10,707,373	24,563,817	1.4%		
2019		13,699,985	10,555,460	24,255,445	(1.3%)		
2020		10,358,348	9,020,899	19,379,247	(20.1%)		
2021		6,903,479	8,397,508	15,300,987	(21.0%)		
2022		8,556,417	8,599,688	17,156,105	12.1%		
2023 ²	18,606,000	9,366,000	8,944,000	18,310,000	6.7%	18,726,000	(2.2%)
2024	20,882,000	10,763,000	9,865,000	20,628,000	12.7%	21,397,000	(3.6%)
2025	21,820,000	11,332,000	10,259,000	21,591,000	4.7%	22,114,000	(2.4%)
2026	22,419,000	11,743,000	10,421,000	22,164,000	2.7%	22,683,000	(2.3%)
2027	22,908,000	12,117,000	10,517,000	22,634,000	2.1%	23,119,000	(2.1%)
2028	23,196,000	12,296,000	10,607,000	22,903,000	1.2%	23,430,000	(2.2%)
2029	23,459,000	12,449,000	10,693,000	23,142,000	1.0%	23,723,000	(2.4%)
2030	23,726,000	12,592,000	10,767,000	23,359,000	0.9%	23,978,000	(2.6%)
2031	23,972,000	12,719,000	10,852,000	23,571,000	0.9%	24,304,000	(3.0%)
2032	24,212,000	12,845,000	10,916,000	23,761,000	0.8%	24,609,000	(3.4%)
2033	24,463,000	12,975,000	10,983,000	23,958,000	0.8%	24,908,000	(3.8%)

¹ The Baseline Forecast includes a 2.5% fare increase on October 1, 2021 (FY 2022) and another 2.5% fare increase plus the elimination of youth passenger fares on October 1, 2022 (FY 2023). The Baseline Forecast excludes any further changes to the current base fares, resulting in declining real fares beyond FY 2023.

^{*} Excludes adjustments for vessel capacity constraints and fiscal year-to-date actual data.



The Baseline Forecast also reflects the current programmed level of service, including the latest post-pandemic service restoration plan.

² FY 2023 includes actual ridership data through May 2023. Light green shaded values denote historical annual data.

RIDERSHIP PROJECTIONS | JUNE 2023 ALTERNATIVE 1 FORECAST

4.25% Fare Increases on October 1, 2023 & 2024 | 2.5% Fare Increases each October thereafter (FYs 2026-33)¹ Fiscal Years 2023-2033

	June 2023	Ju	ıne 2023 Capacity Cons	;	March 2023 A	Alternative 1	
Fiscal Year	Unconstrained Demand Forecast*	Passenger Ridership	Vehicle/Driver Ridership	Total Ridership	Annual Rate of Change	Total Ridership	June 2023 vs March
2014		12,696,936	10,154,905	22,851,841	2.0%		
2015		13,270,874	10,387,368	23,658,242	3.5%		
2016		13,523,385	10,559,240	24,082,625	1.8%		
2017		13,669,834	10,544,735	24,214,569	0.5%		
2018		13,856,444	10,707,373	24,563,817	1.4%		
2019		13,699,985	10,555,460	24,255,445	(1.3%)		
2020		10,358,348	9,020,899	19,379,247	(20.1%)		
2021		6,903,479	8,397,508	15,300,987	(21.0%)		
2022		8,556,417	8,599,688	17,156,105	12.1%		
2023 ²	18,606,000	9,366,000	8,944,000	18,310,000	6.7%	18,726,000	(2.2%)
2024	20,776,000	10,700,000	9,825,000	20,525,000	12.1%	21,333,000	(3.8%)
2025	21,499,000	11,152,000	10,127,000	21,279,000	3.7%	21,920,000	(2.9%)
2026	21,903,000	11,462,000	10,204,000	21,666,000	1.8%	22,347,000	(3.0%)
2027	22,245,000	11,753,000	10,242,000	21,995,000	1.5%	22,639,000	(2.8%)
2028	22,395,000	11,856,000	10,275,000	22,131,000	0.6%	22,812,000	(3.0%)
2029	22,522,000	11,934,000	10,312,000	22,246,000	0.5%	22,979,000	(3.2%)
2030	22,665,000	12,003,000	10,360,000	22,363,000	0.5%	23,130,000	(3.3%)
2031	22,793,000	12,061,000	10,433,000	22,494,000	0.6%	23,352,000	(3.7%)
2032	22,911,000	12,111,000	10,480,000	22,591,000	0.4%	23,546,000	(4.1%)
2033	23,032,000	12,158,000	10,533,000	22,691,000	0.4%	23,728,000	(4.4%)

¹ The Alternative 1 Forecast pairs 4.25% fare increasess on October 1, 2023 (FY 2024) and 2024 (FY 2025) with a temporary 1% additional discount on multi-ride (commuter) fares and then continues annual 2.5% fare increases each October thereafter, from October 1, 2025 (FY 2026) through October 1, 2032 (FY 2033).

The Alternative 1 Forecast reflects the current programmed level of service, including the latest post-pandemic service restoration plan.

^{*} Excludes adjustments for vessel capacity constraints and fiscal year-to-date actual data.



² FY 2023 includes actual ridership data through February 2023. Light green shaded values denote historical annual data.

Washington State Ferries — Ridership History and Forecast Trends

