ACTION INTEL

Data Analytics for More Efficient Barge Movement

Green Marine Highway Initiative
5 November 2025

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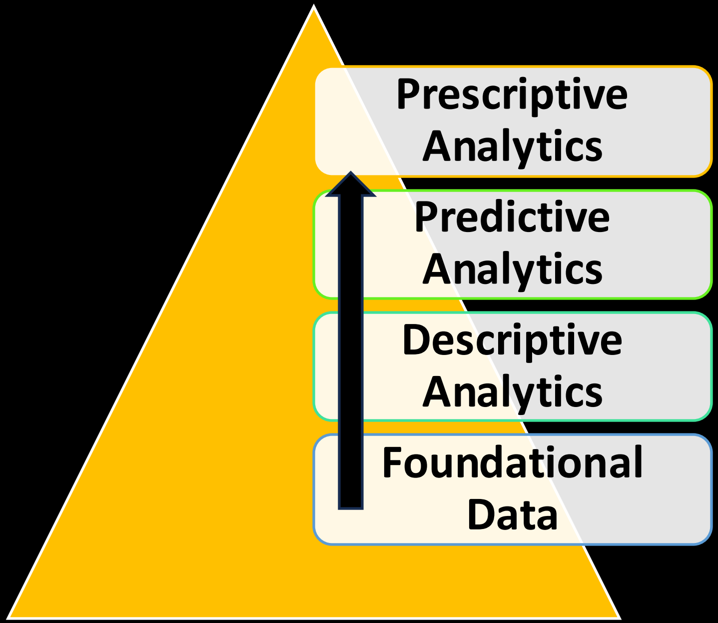
Founder, Action Intel

Data, computational power, and analytics are here to transform the efficiency of barge towing.



What should I do based on expected outcomes?

What is the probability of future outcomes?

What does history tell me?

What data is available to me?

Operational Benchmarking –
Discovering efficiencies through comparison

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Chart Parameters

Select start date

05/03/2025

Select end date

10/30/2025

Select by tow type category or individual owners

- (●) Tow type category
- ( ) Individual owners

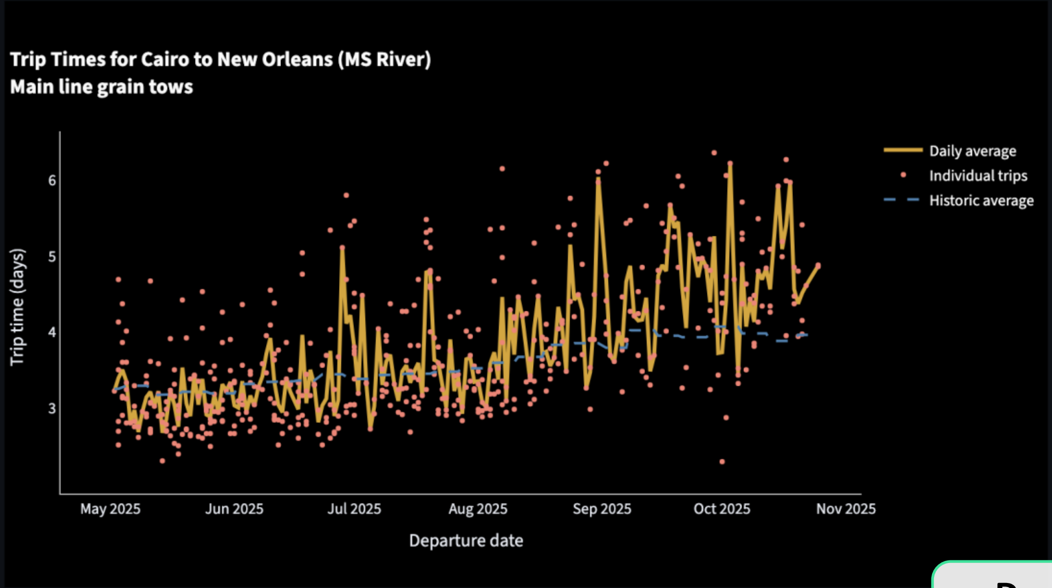
Select tow type category

Main line grain tows

Select min and max towboat horsepower

1000 hp — 13200 hp

BargeAI™ River Transit Times



Descriptive Analytics

Operational Benchmarking –
Discovering efficiencies through comparison

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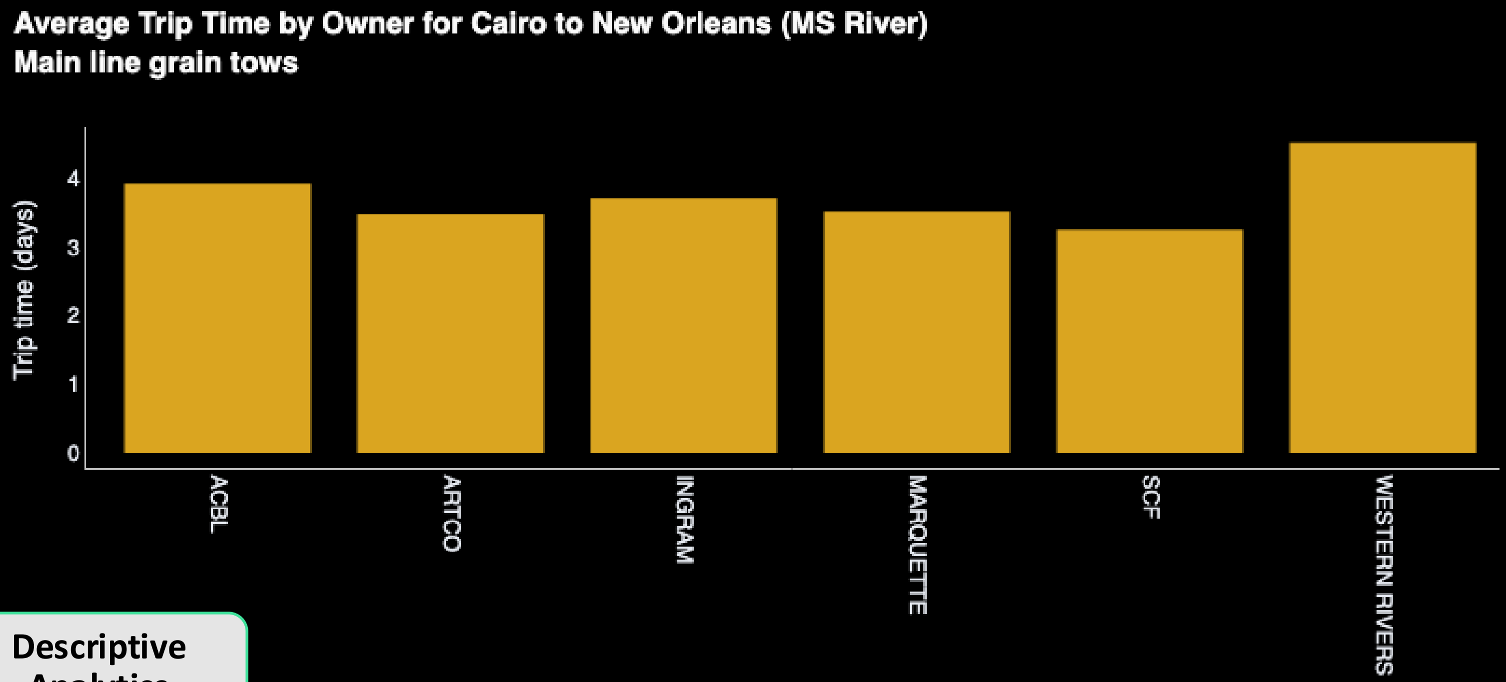

Descriptive Analytics

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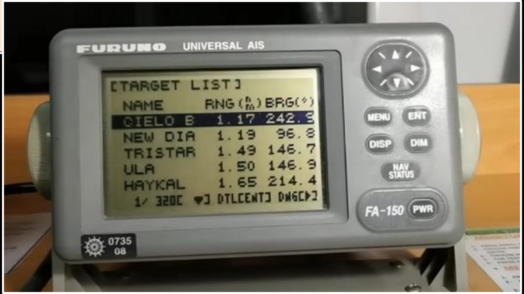
Automating Critical Metrics –
Fuel burn and emissions assessments

event_id	vesselname	event_type	start_time	end_time	duration_hours	miles
40217	TOWBOAT_C	transit	9/19/25 10:53	9/20/25 5:54	19.0	84
40217	TOWBOAT_C	stop	9/20/25 6:00	9/21/25 22:47	40.8	
40217	TOWBOAT_C	transit	9/21/25 23:00	9/21/25 23:01	0.0	1
40217	TOWBOAT_C	stop	9/21/25 23:47	9/22/25 6:06	6.3	
40217	TOWBOAT_C	transit	9/22/25 19:00	9/23/25 7:51	12.9	57
40217	TOWBOAT_C	stop	9/23/25 8:00	9/23/25 9:49	1.8	
40217	TOWBOAT_C	transit	9/23/25 11:53	9/23/25 13:11	1.3	15
40217	TOWBOAT_C	stop	9/23/25 13:52	9/24/25 10:48	20.9	
40217	TOWBOAT_C	transit	9/24/25 11:09	9/25/25 3:20	16.2	71
40217	TOWBOAT_C	stop	9/25/25 3:30	9/25/25 4:40		



Descriptive Analytics

Predictive ETAs –
Waze of the Waterways to optimize resource usage

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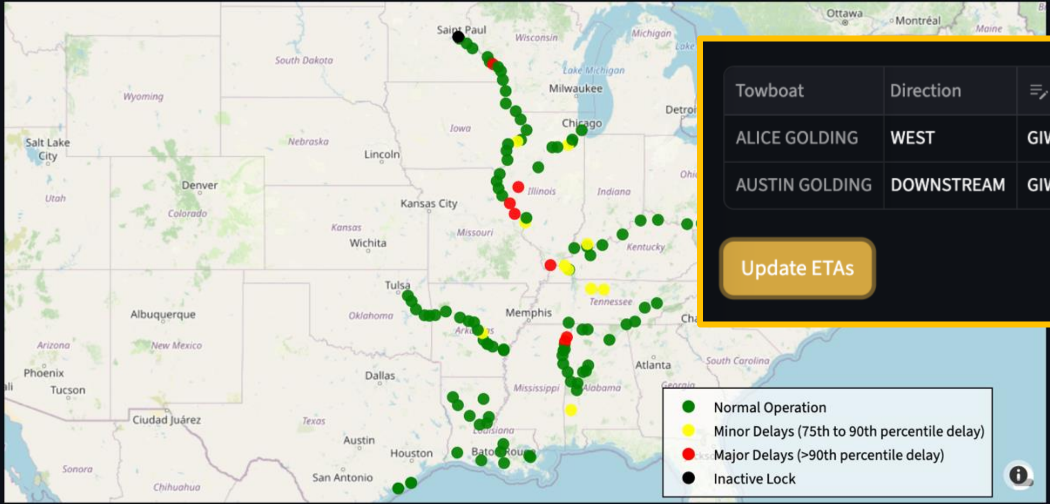
River Levels | Tow Transit Times (ETAs) | Barge Analytics | Lock Navigator™ | Barge Flows | Grain Barge Movements | Grain Export Inspectio

BargeAI™ Lock Status at a Glance



Data Last Updated 10-30-25 12:59 CT

Towboat	Direction	▶ Destination River	▶ Destination MM	Direct Route ETA
ALICE GOLDING	WEST	GIWW-WEST	540	2025-11-02 15:42:18-06:00
AUSTIN GOLDING	DOWNSTREAM	GIWW-WEST	540	2025-11-06 14:02:21-06:00

Update ETAs

Predictive Analytics

Prescriptive Action Example – Combining tows to avoid light loads on outer reaches

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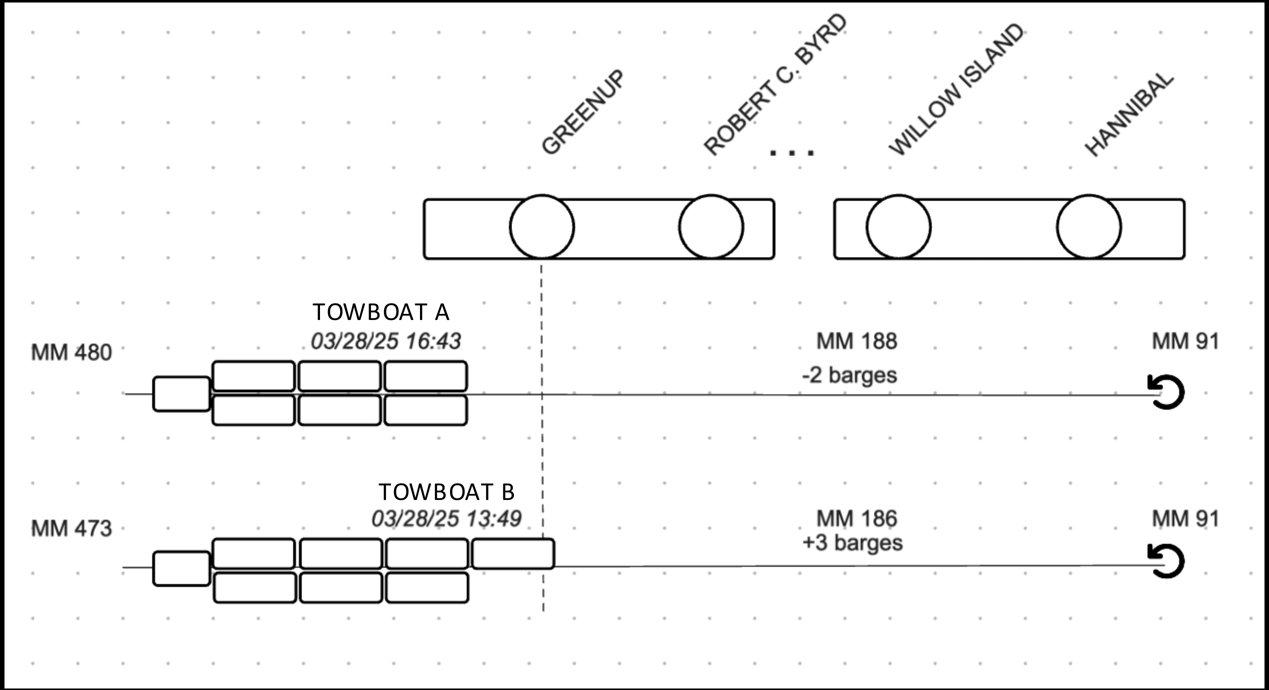

Prescriptive Analytics

Thank you!

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