

2024 Illinois Farm Economics Summit

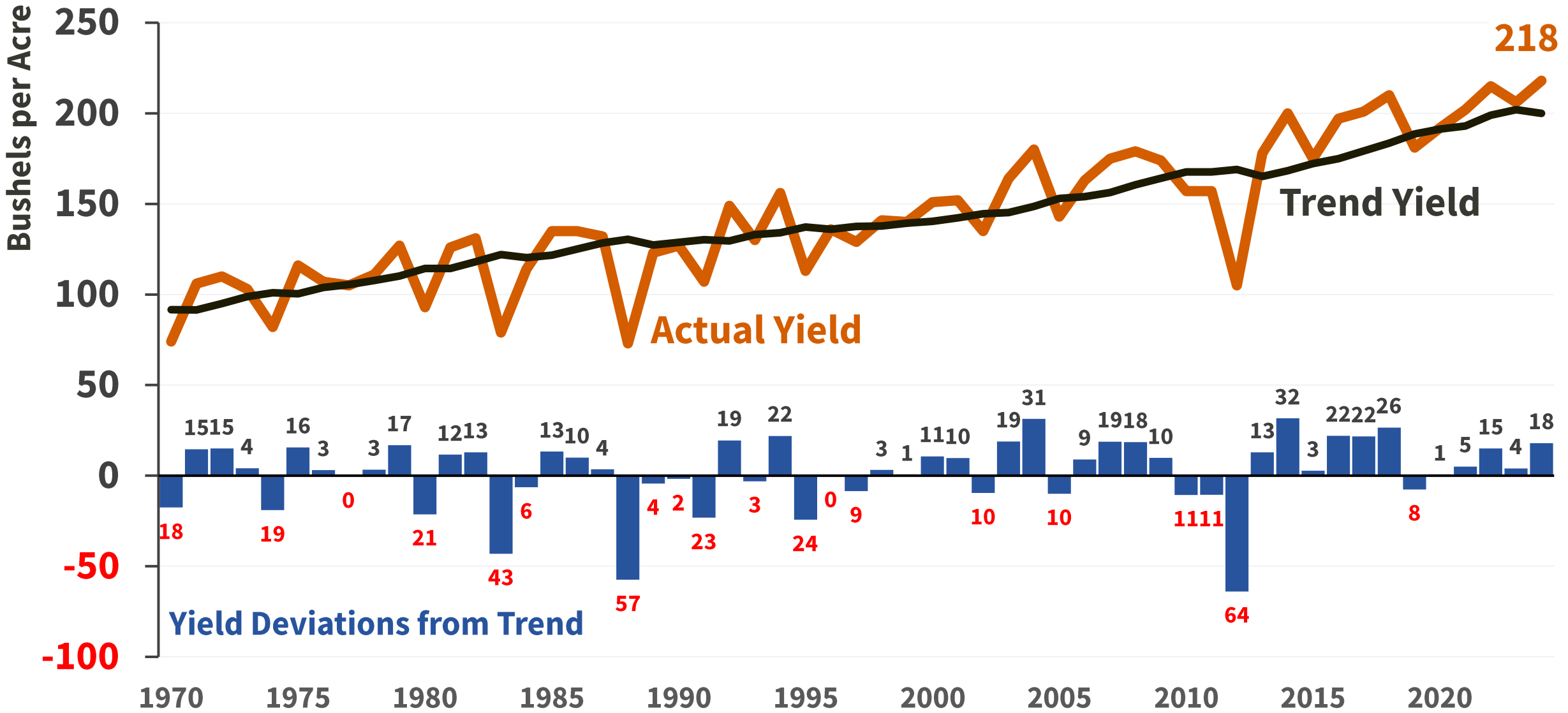
Illinois Farm Income Outlook and Management Strategies with Low Incomes

Nick Paulson and Gary Schnitkey

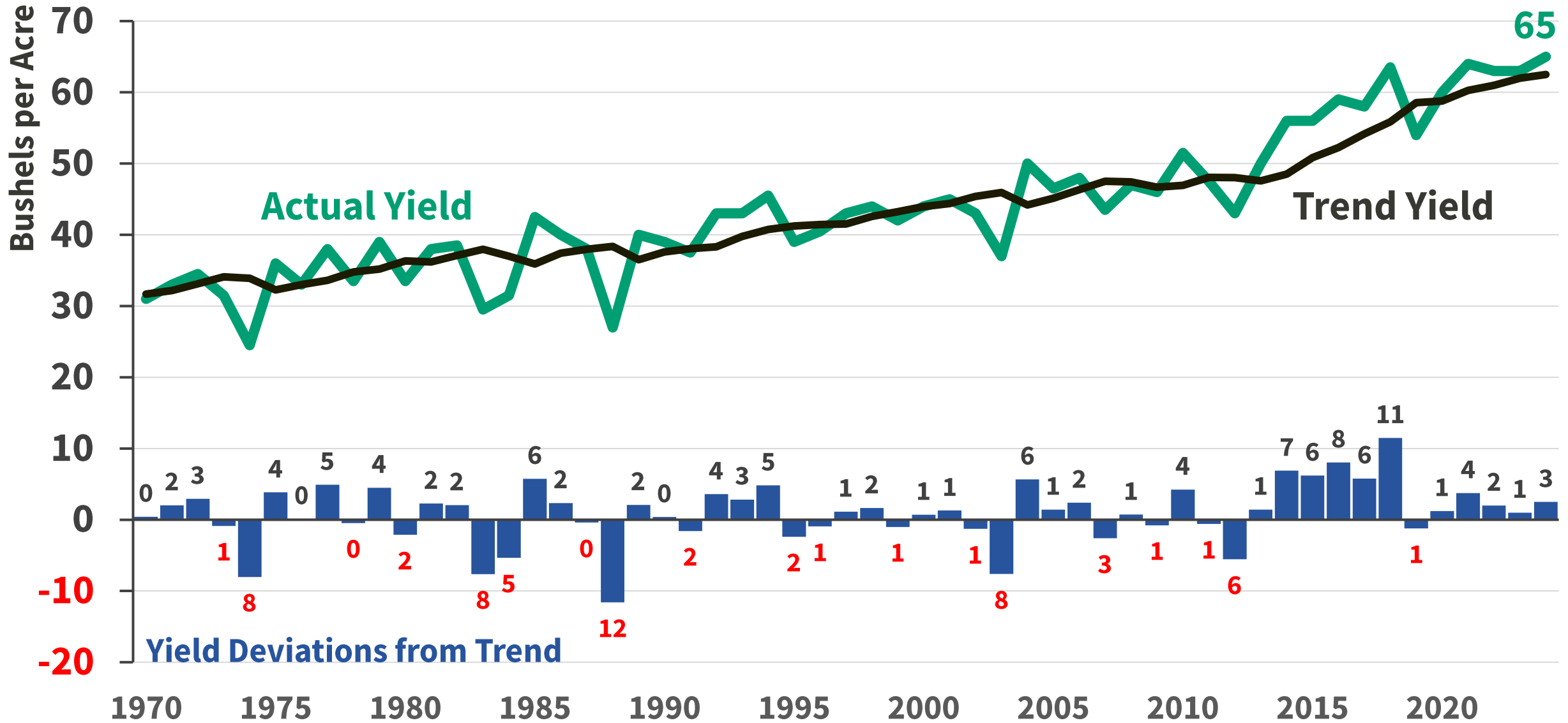
Yields and Prices



Illinois Corn Yields, 1970 to 2024P

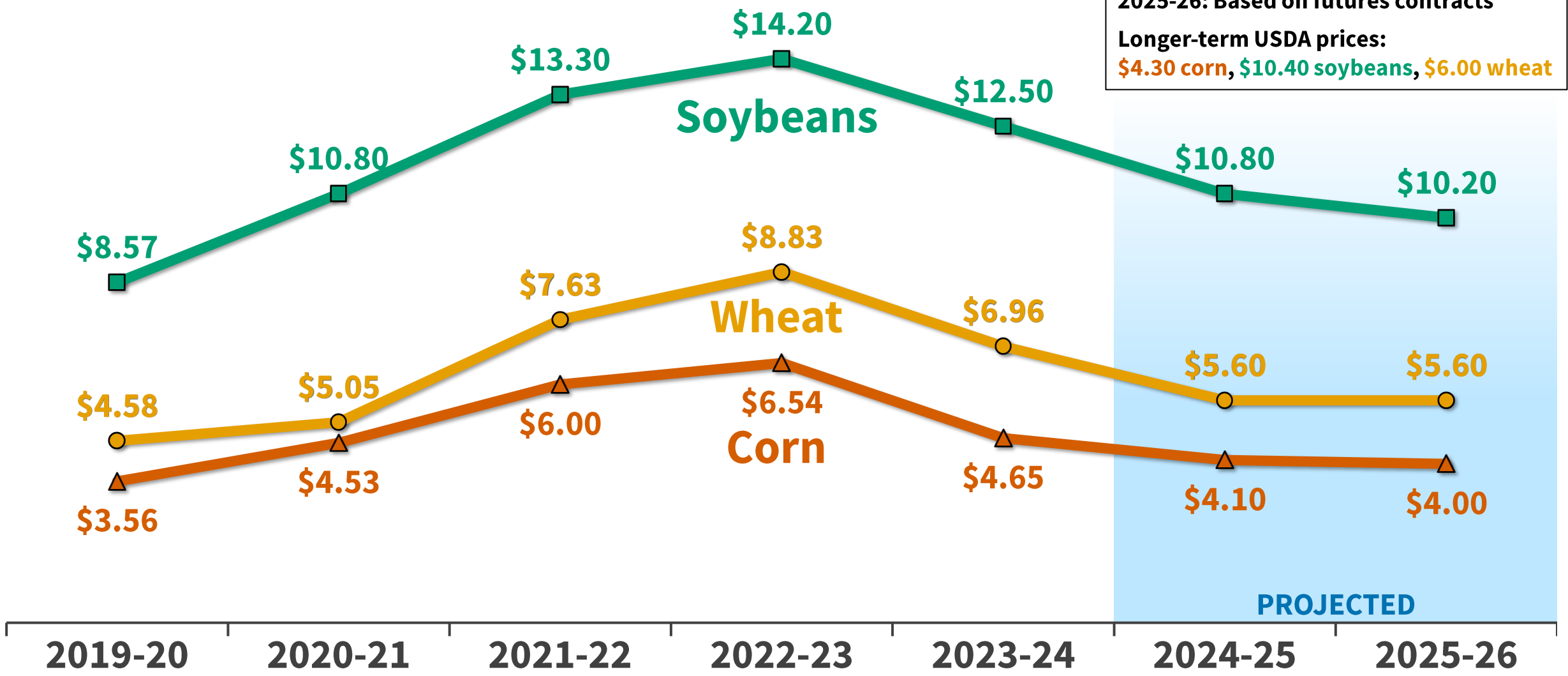


Illinois Soybean Yields, 1970 to 2024P



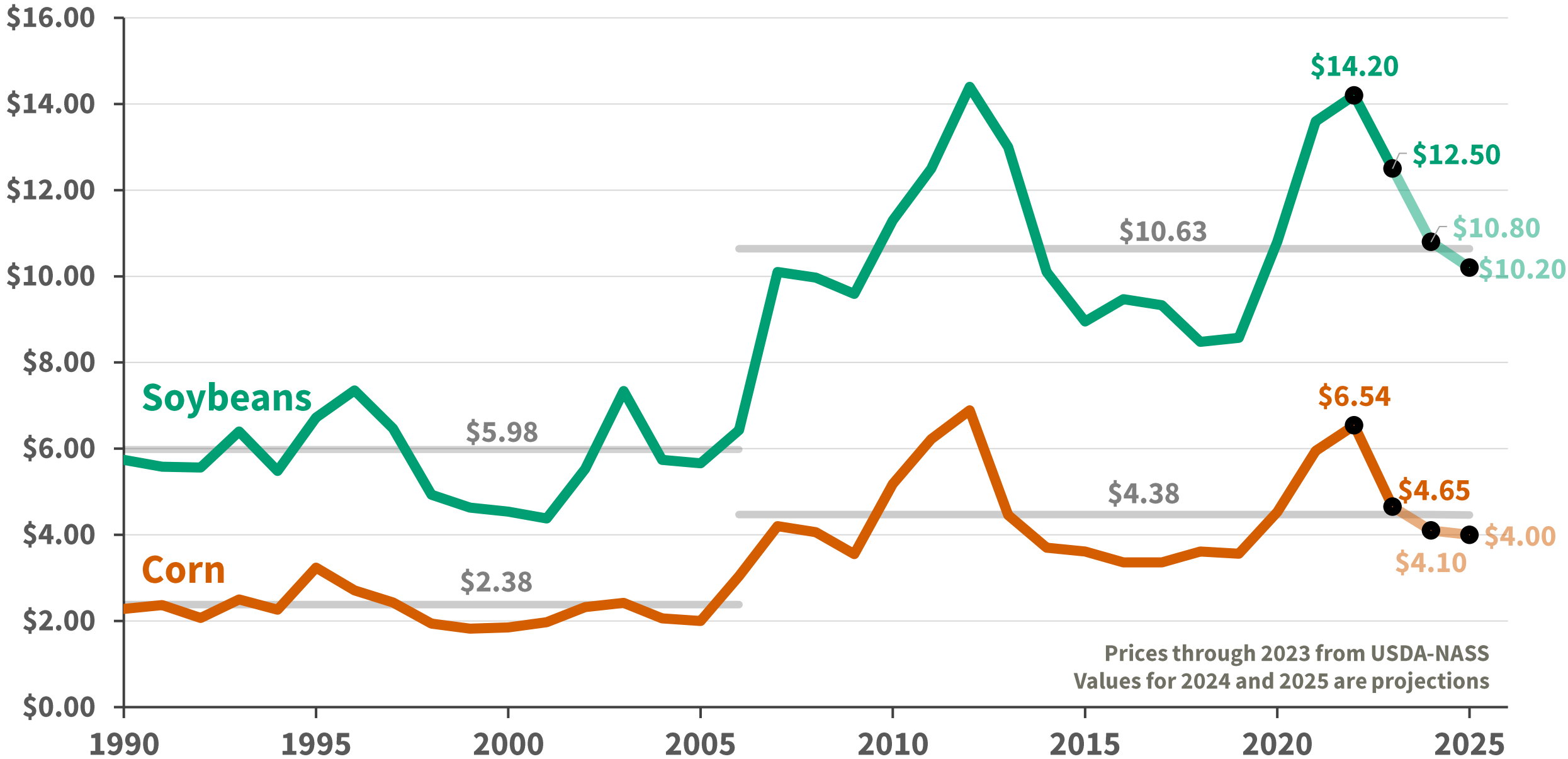
U.S. Prices by Marketing Year

USDA price forecasts
 2024-25: USDA estimates in Nov WASDE
 2025-26: Based on futures contracts
 Longer-term USDA prices:
 \$4.30 corn, \$10.40 soybeans, \$6.00 wheat



National Market Year Average (MYA) price by year
 September to August for corn and soybeans
 June to May for wheat

U.S. Market Year Average Prices for Corn and Soybeans 1960 to 2025P



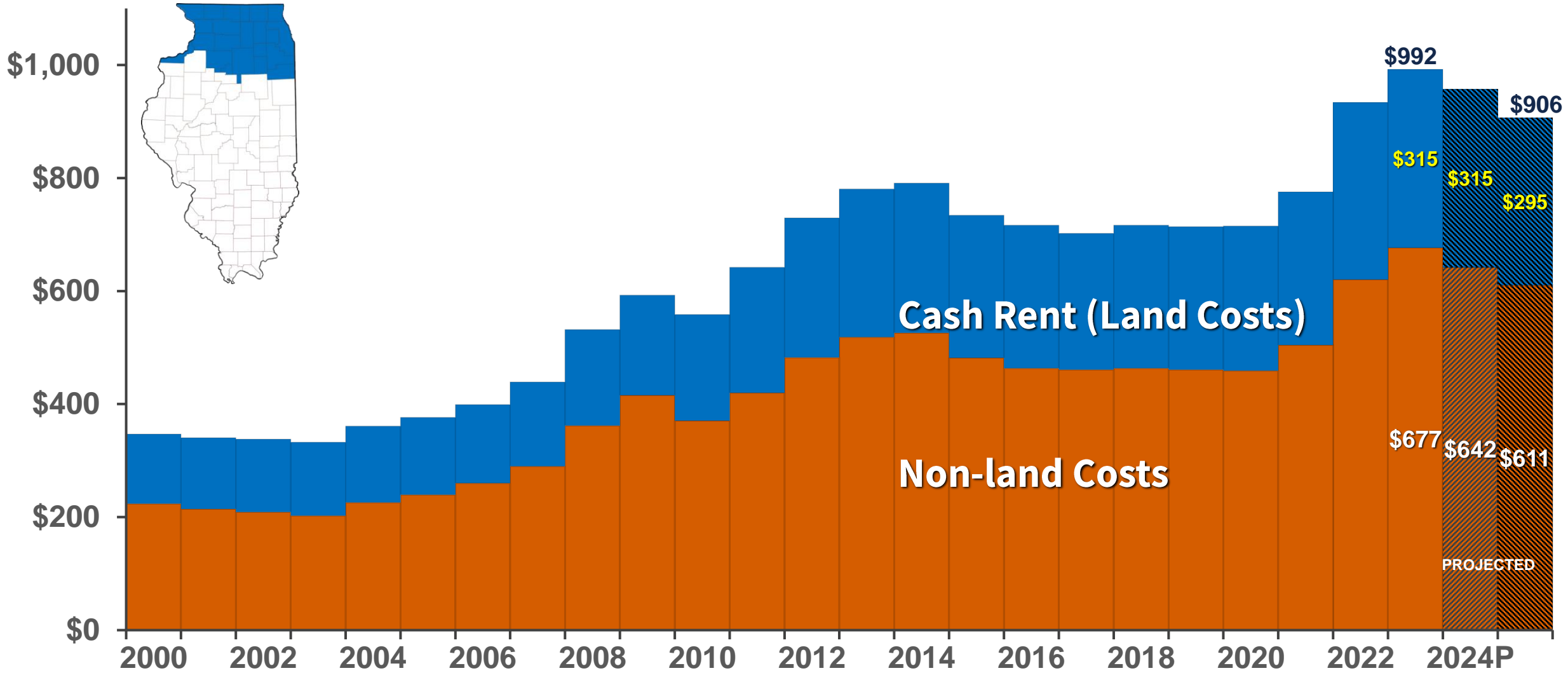
Prices through 2023 from USDA-NASS
Values for 2024 and 2025 are projections

Production Costs and Farmland



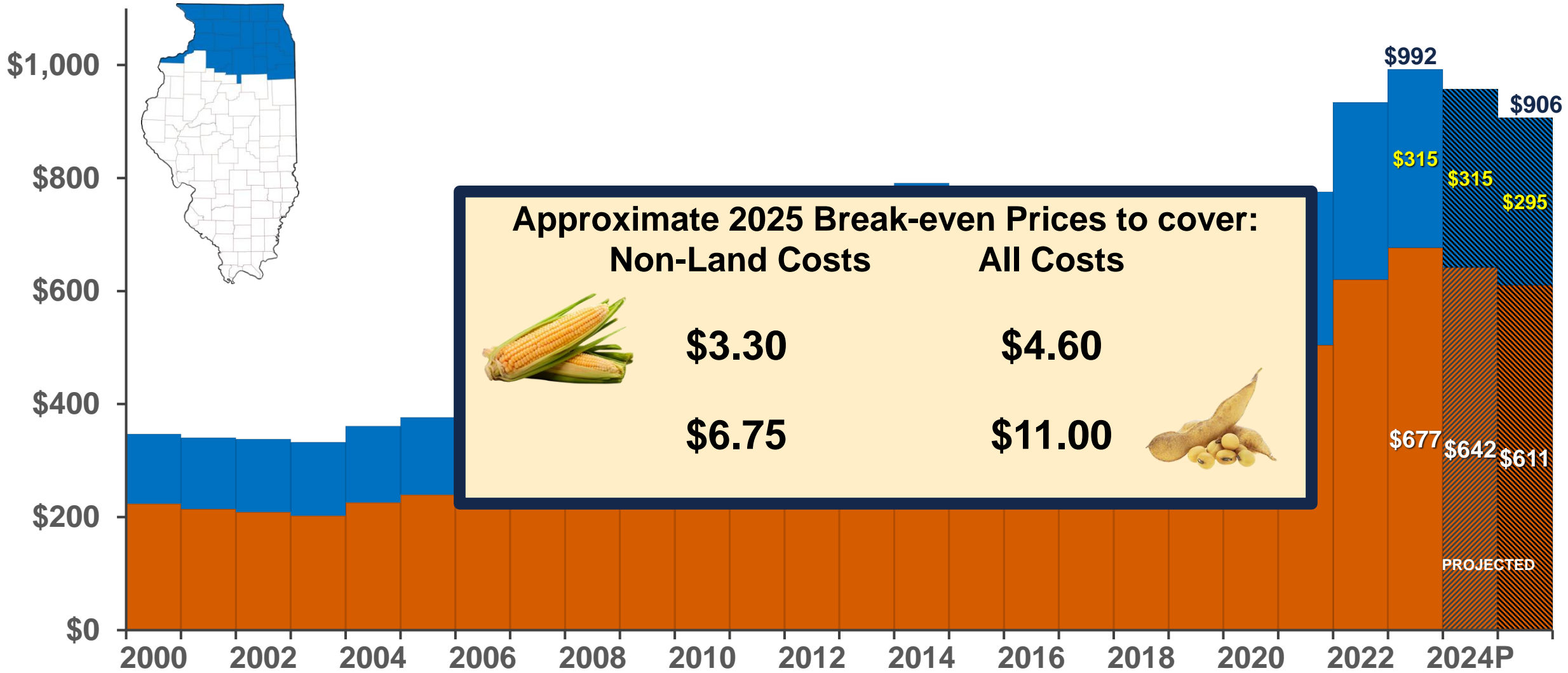
Production Costs for Northern Illinois in \$ per acre

50-50 Corn-Soy Rotation, 2000 to 2025P



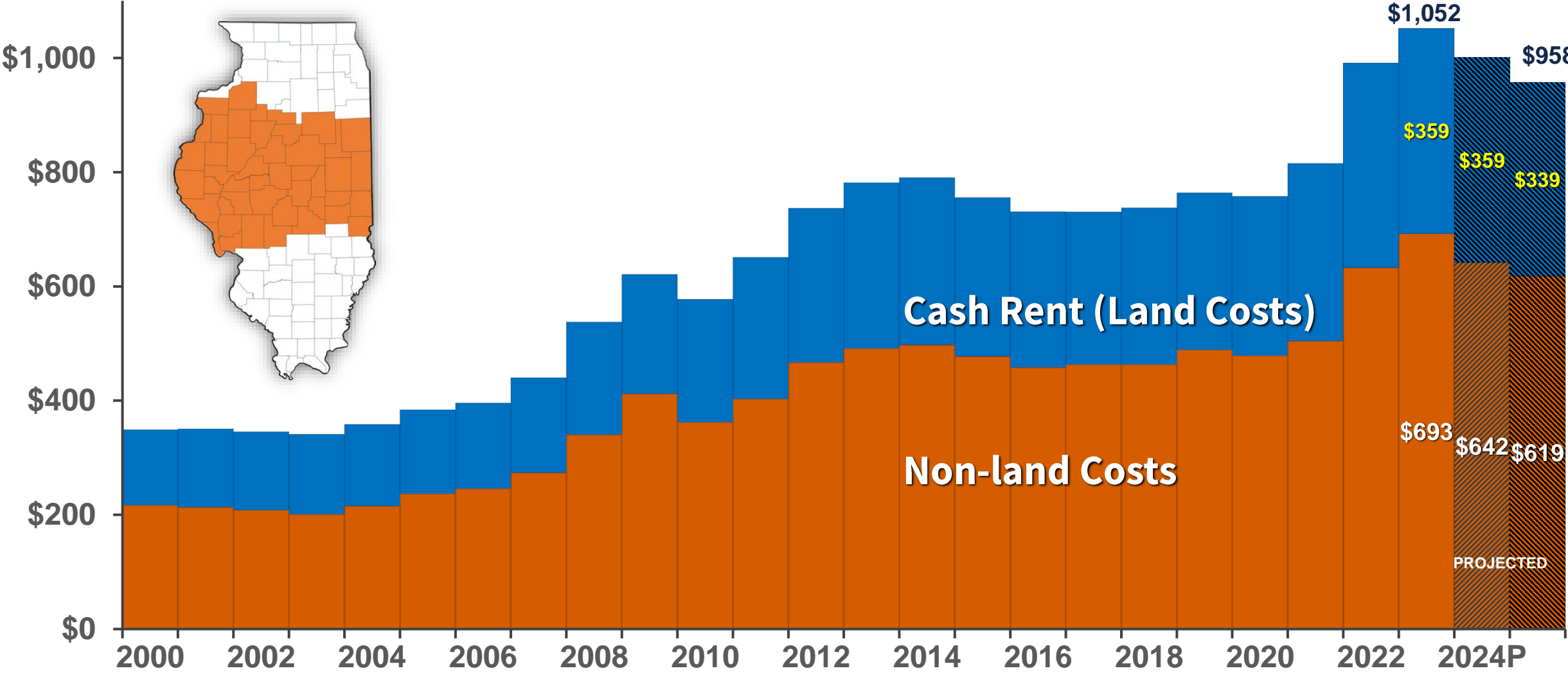
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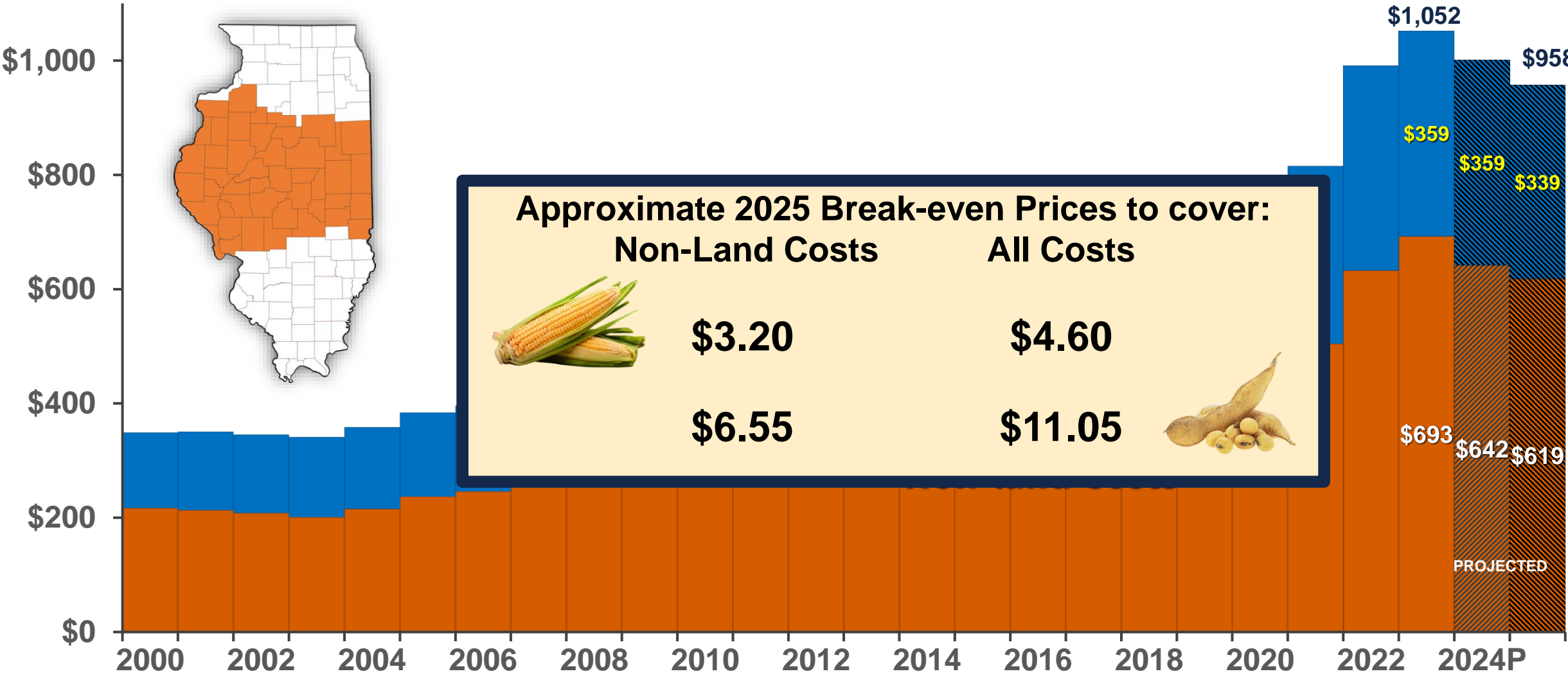
Production Costs for **Central Illinois** in \$ per acre

50-50 Corn-Soy Rotation, 2000 to 2025P



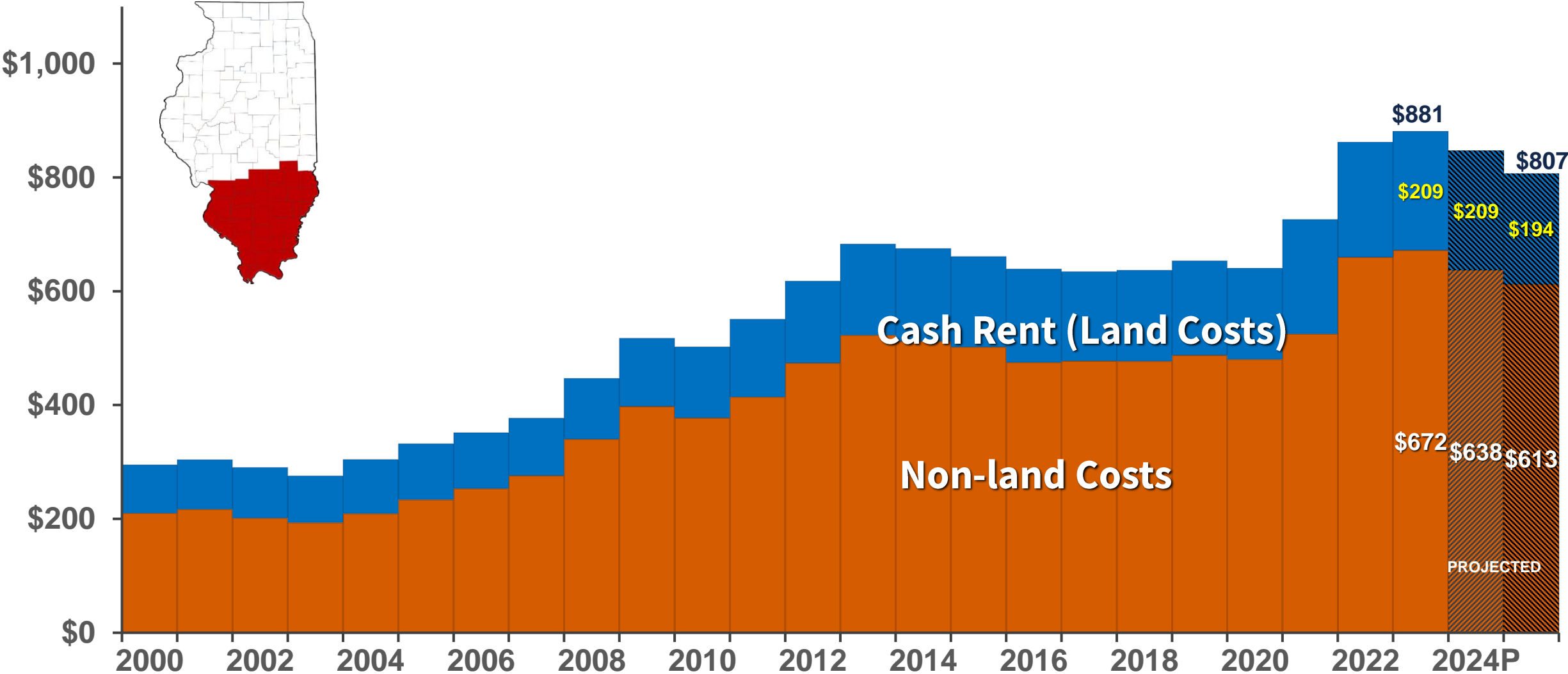
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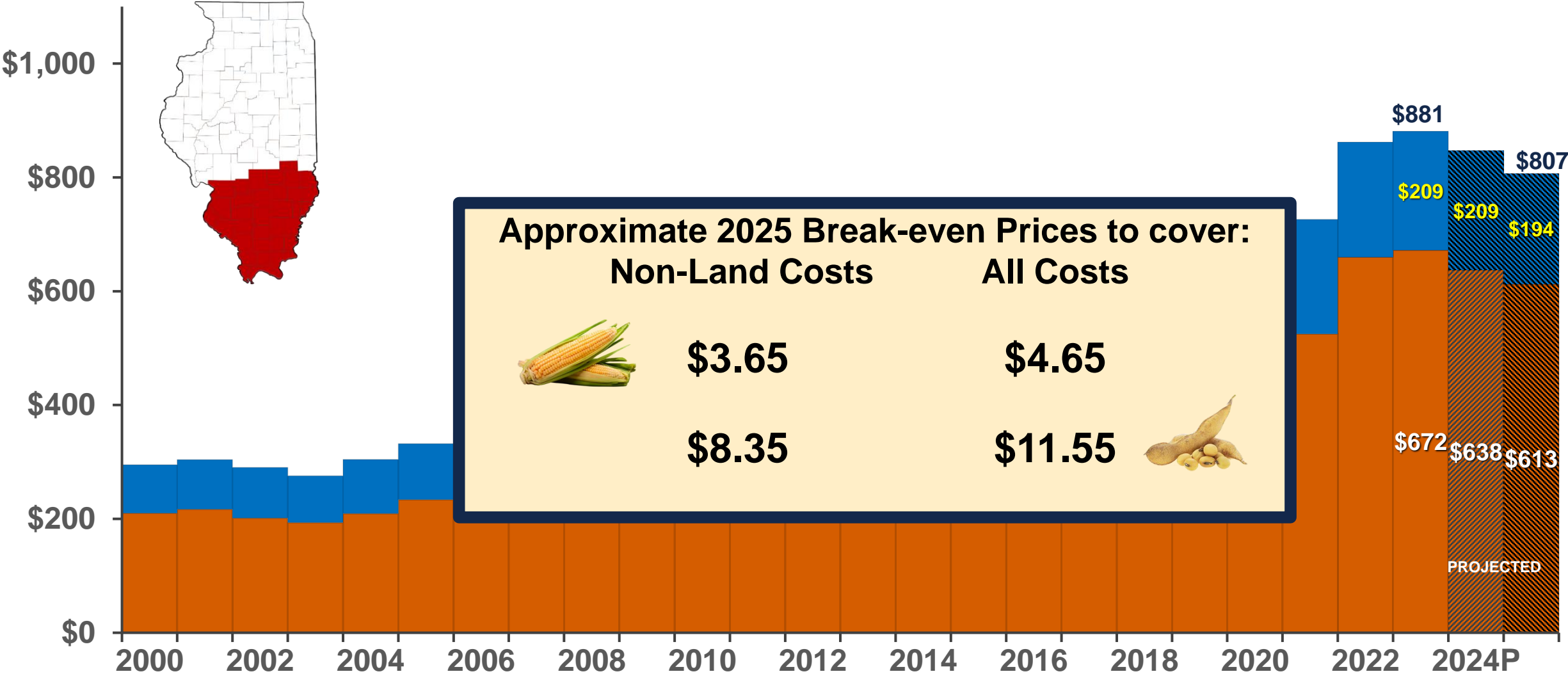
Production Costs for **Southern Illinois** in \$ per acre

50-50 Corn-Soy Rotation, 2000 to 2025P



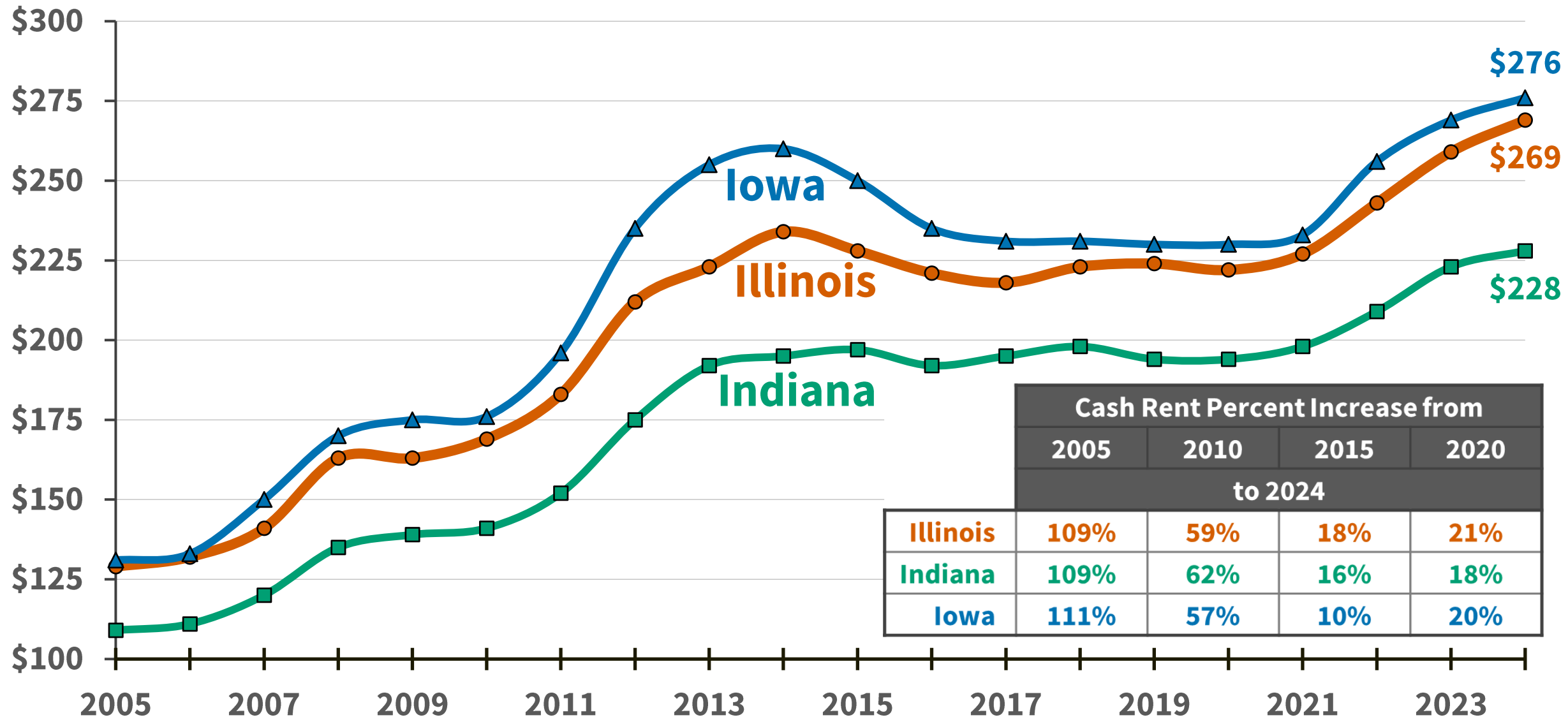
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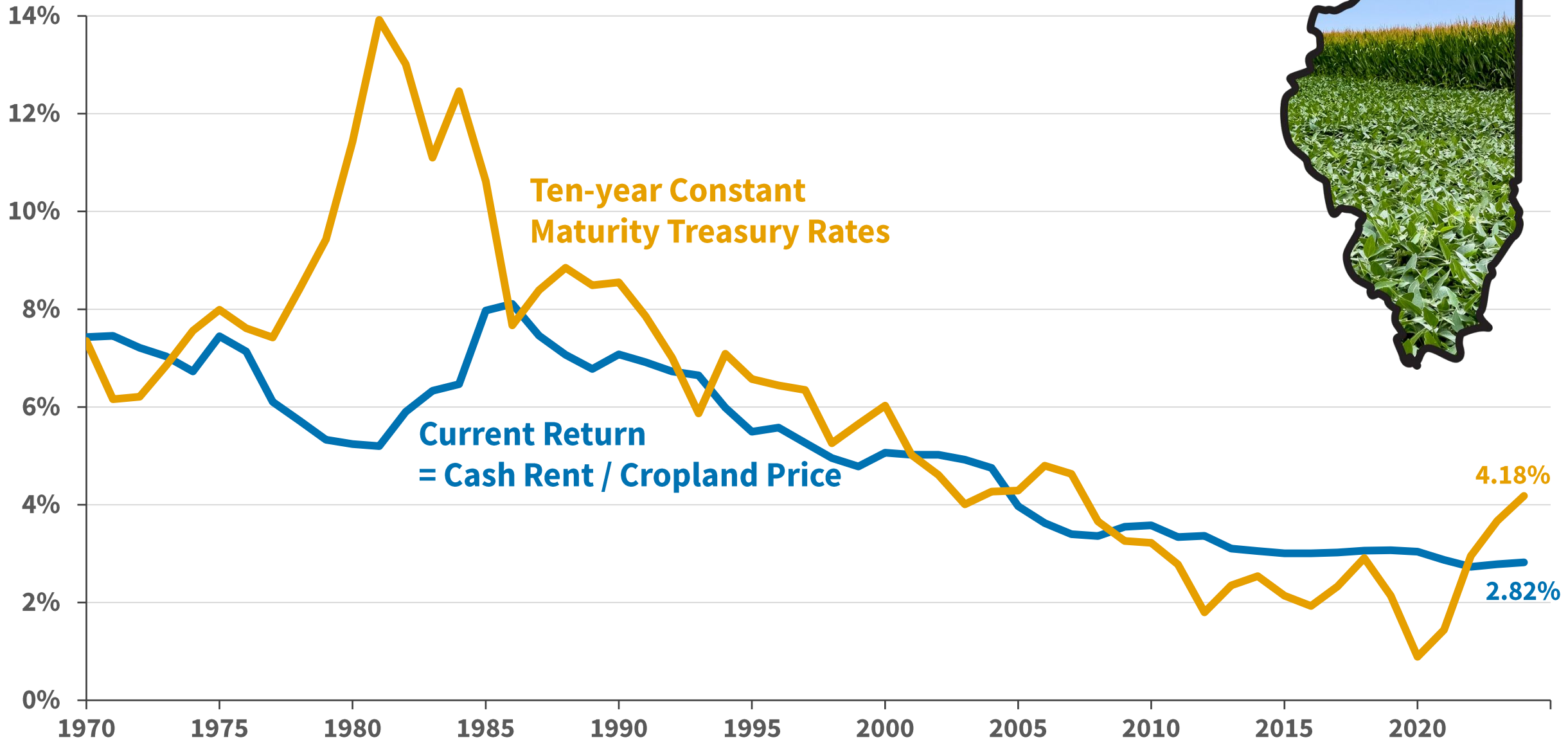
Average Cash Rents in Illinois, Indiana, and Iowa

\$ per acre



Cash Rent Percent Increase from				
	2005	2010	2015	2020
to 2024				
Illinois	109%	59%	18%	21%
Indiana	109%	62%	16%	18%
Iowa	111%	57%	10%	20%

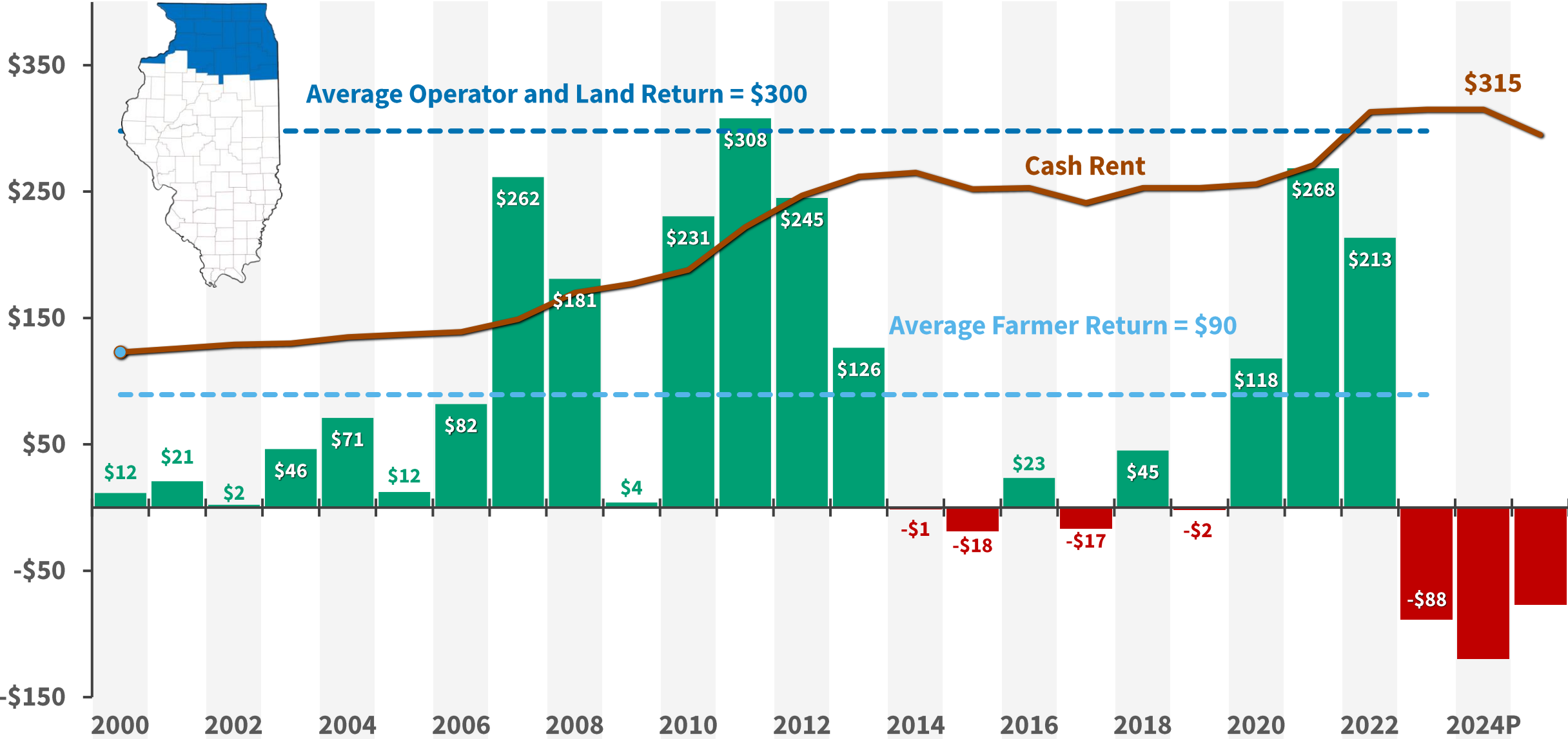
Ten-year Constant Maturity Treasury (CMT) Rates and Current Returns to Illinois Farmland, 1970 to 2024



Returns and Farm Income

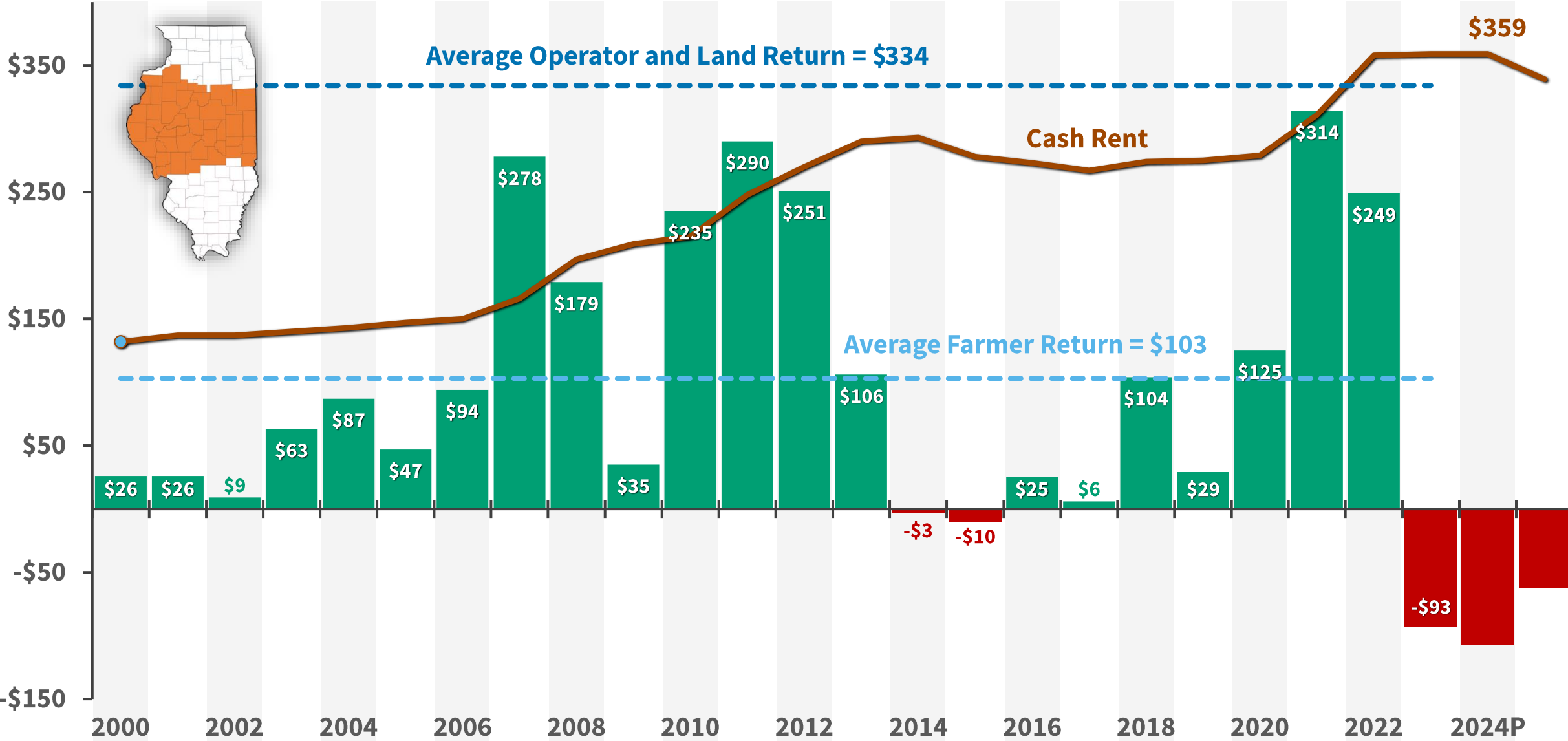


Returns to a 50% Corn – 50% Soybean Rotation in \$ per acre on Northern Illinois, Cash Rented Farmland



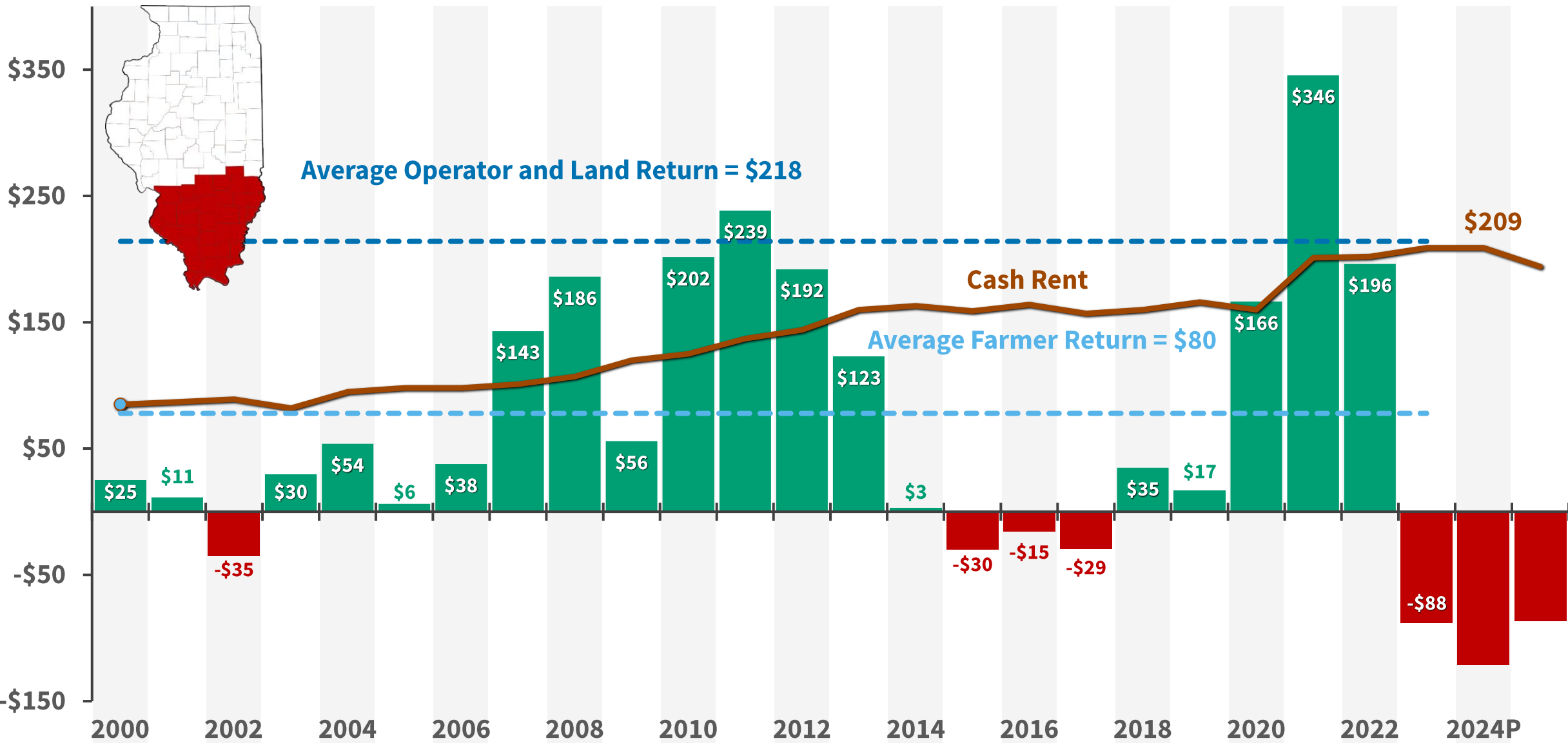
Source: Illinois FBFM and *farmdoc* projections

Returns to a 50% Corn – 50% Soybean Rotation in \$ per acre on Central Illinois, Cash Rented Farmland



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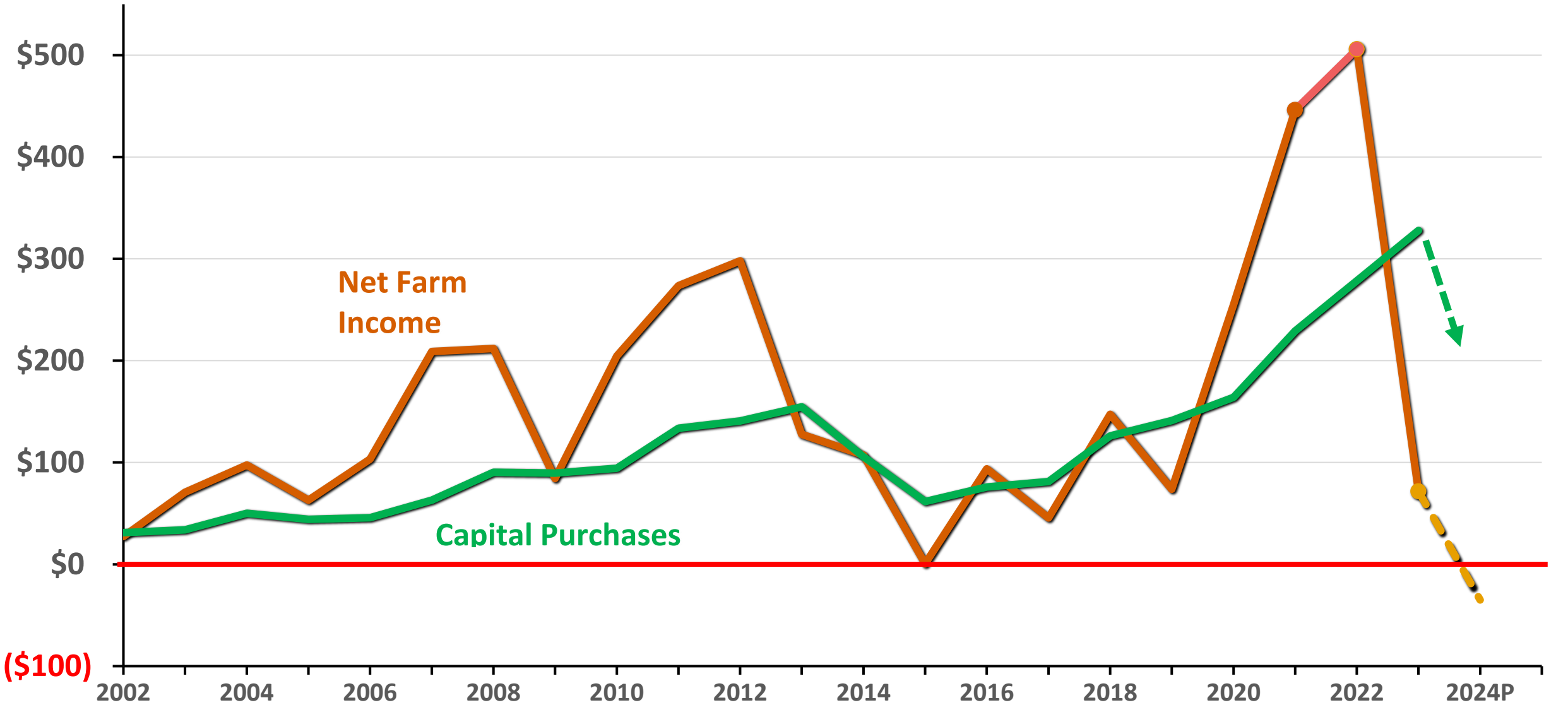
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Source: Illinois FBFM and *farmdoc* projections

Net Farm Income and Capital Purchases on Grain Farms (in \$1,000)

Enrolled in Illinois Farm Business Farm Management



(\$100)

Strategies for Dealing with Low Income



Corn and Soybeans

Commodity-based business with little ways of differentiating oneself

- Commodity-based business with attributes
 - Easy in and out: Non-GMO soybeans, Food grade corn
 - Marketing with on-farm storage
 - More difficult in and out: Organic
- Low-cost producer has the advantage
- **Land strategies:** What are you going to do about cash rents?
- **Growth strategies:** An operation needs to grow if it plans on being in business for more than ten years

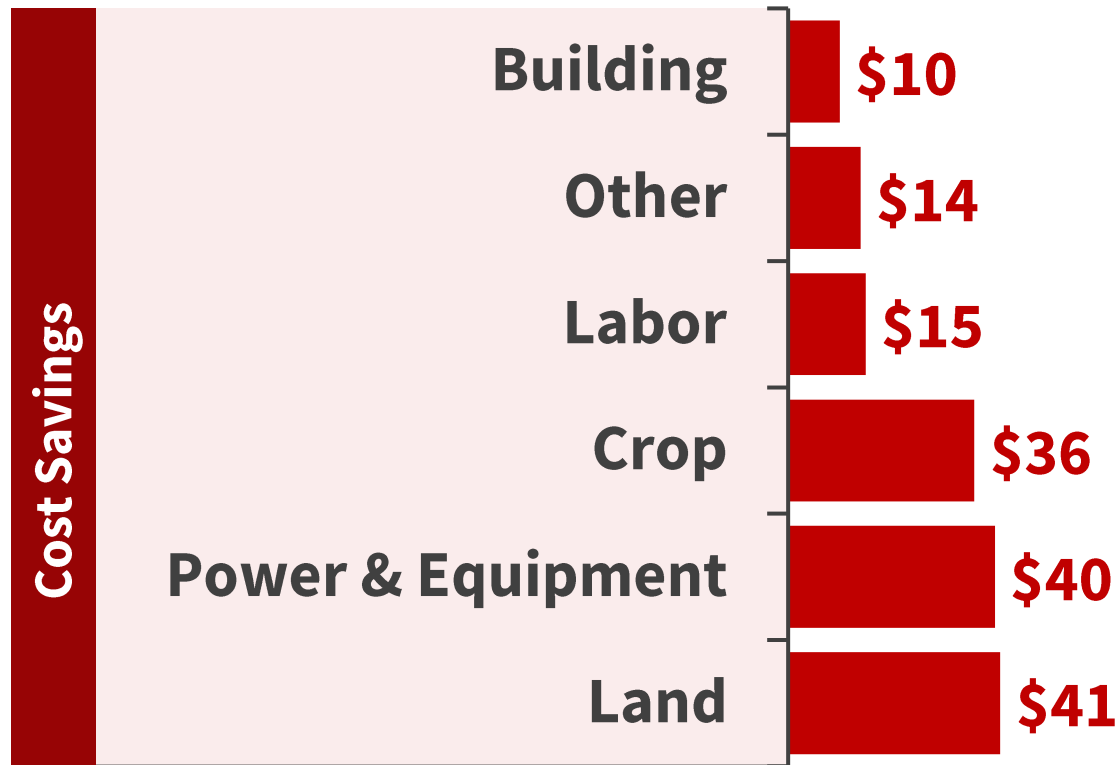
Strategies

1. Be a low-cost producer

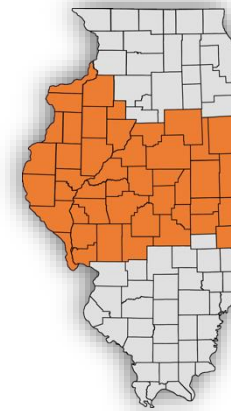
2. Reassess land rental strategies

3. Take advantage of available government programs

1. Be a low-cost producer



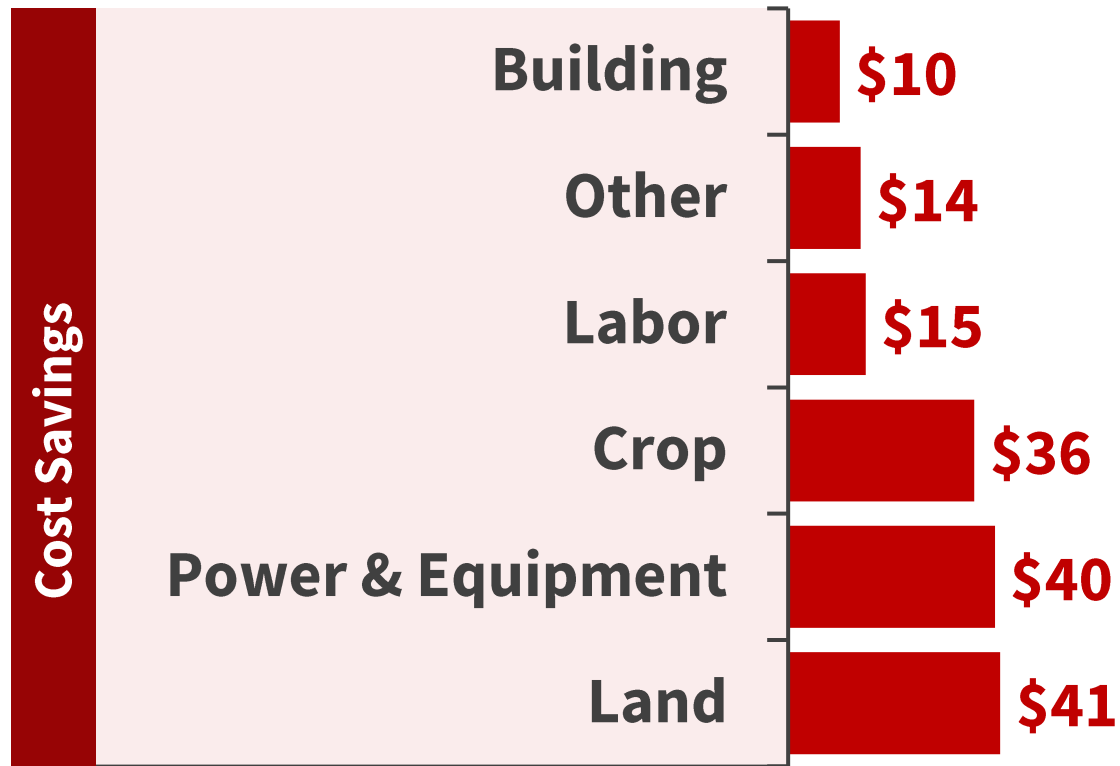
Financial advantage between highest profit grain farms (high 1/3) and the lower profit grain farms (low 1/3)



FBFM

High-Productivity farms in Central Illinois
2013 - 2022

Be a low-cost producer



The same producers have:

- Above university nitrogen rate
- Higher pesticide costs
- More tillage passes

See Schnitkey and Gentry, “Strategies for Withstanding Low-Profitability Years”, Farmdoc webinar, December 10, 2024

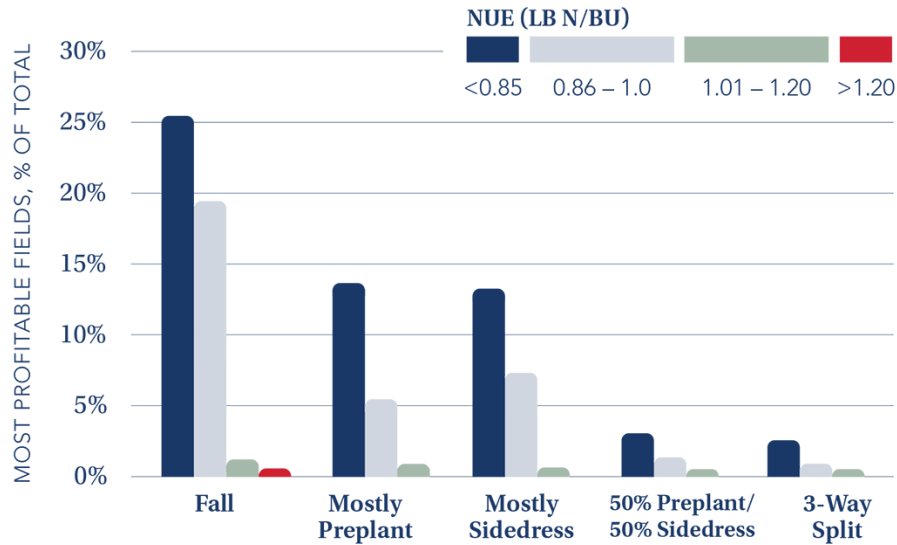


Apply nitrogen at university recommended rates

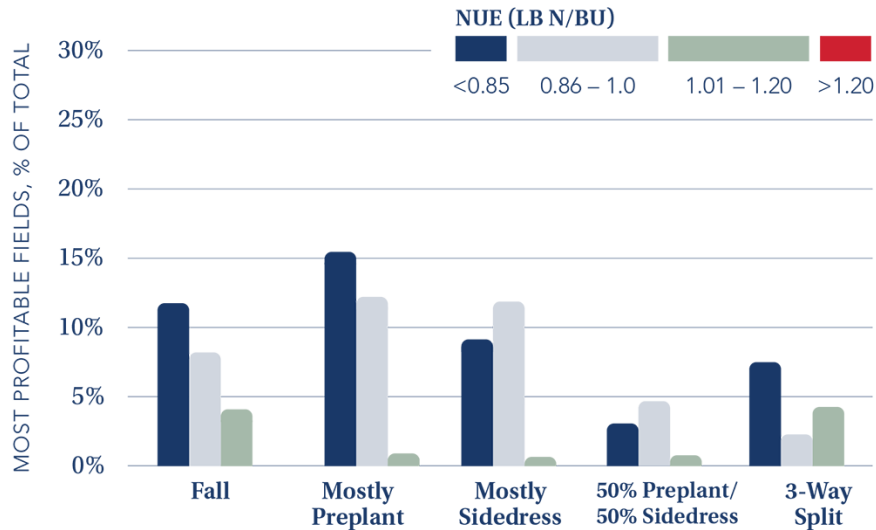
Corn N RATE, HIGH SPR, LBS PER ACRE 2015-23 AVG VALUES	<150	151-175	176-200	201-225	>225
# fields	181	599	1,854	2,558	1,430
AVG Corn Yield (bu/a) 2015-23	208	218	220	223	229
OPERATOR & LAND RETURN	\$361	\$371	\$365	\$354	\$346
GHG emissions (metric tons CO2e/a)	0.38	0.61	0.66	0.74	0.9



GOOD YEARS = "MORE PROFITABLE YEARS"



BAD YEARS = "AVERAGE TO LESS PROFITABLE YEARS"

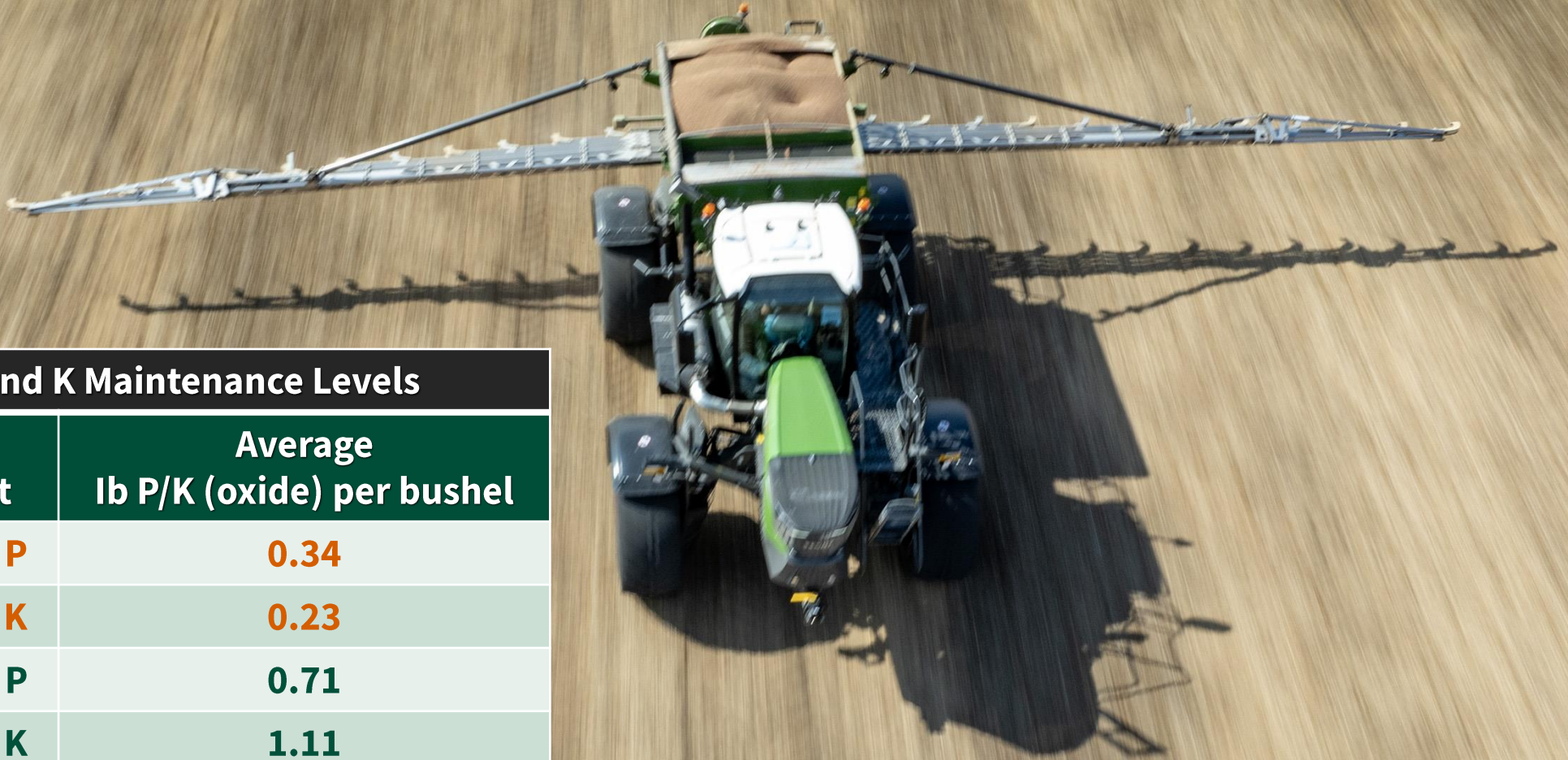


Most Profitable Corn Acres, Parsed by Nitrogen Management

- Nitrogen application **RATE** is the most important N management decision for determining profitability
- Nitrogen application **TIMING** becomes more important in lower commodity price years



Keep P and K in soil test lines



P and K Maintenance Levels	
Nutrient	Average lb P/K (oxide) per bushel
Corn P	0.34
Corn K	0.23
Soybean P	0.71
Soybean K	1.11

Consider Reducing Tillage Pass

Corn HIGH SPR 2015-23 AVG VALUES	NO-TILL	STRIP TILL	1-PASS LIGHT	2-PASS LIGHT	2-PASS MODERATE	2+ TILLAGE PASSES
# of fields	1,262	1,628	1,964	708	889	112
Yield per acre	219	221	222	227	227	223
TOTAL NON-LAND COSTS	\$584	\$618	\$587	\$609	\$620	\$632
OPERATOR & LAND RETURN	\$360	\$335	\$365	\$367	\$355	\$331

Lower tillage systems are more profitable in the lower return years

Delay capital purchases

- Particularly machinery
- Prioritize purchases that have the potential to increase revenue in the future (e.g., tile, farmland, on-farm storage)



Strategies

1. Be a low-cost producer

2. Reassess land rental strategies

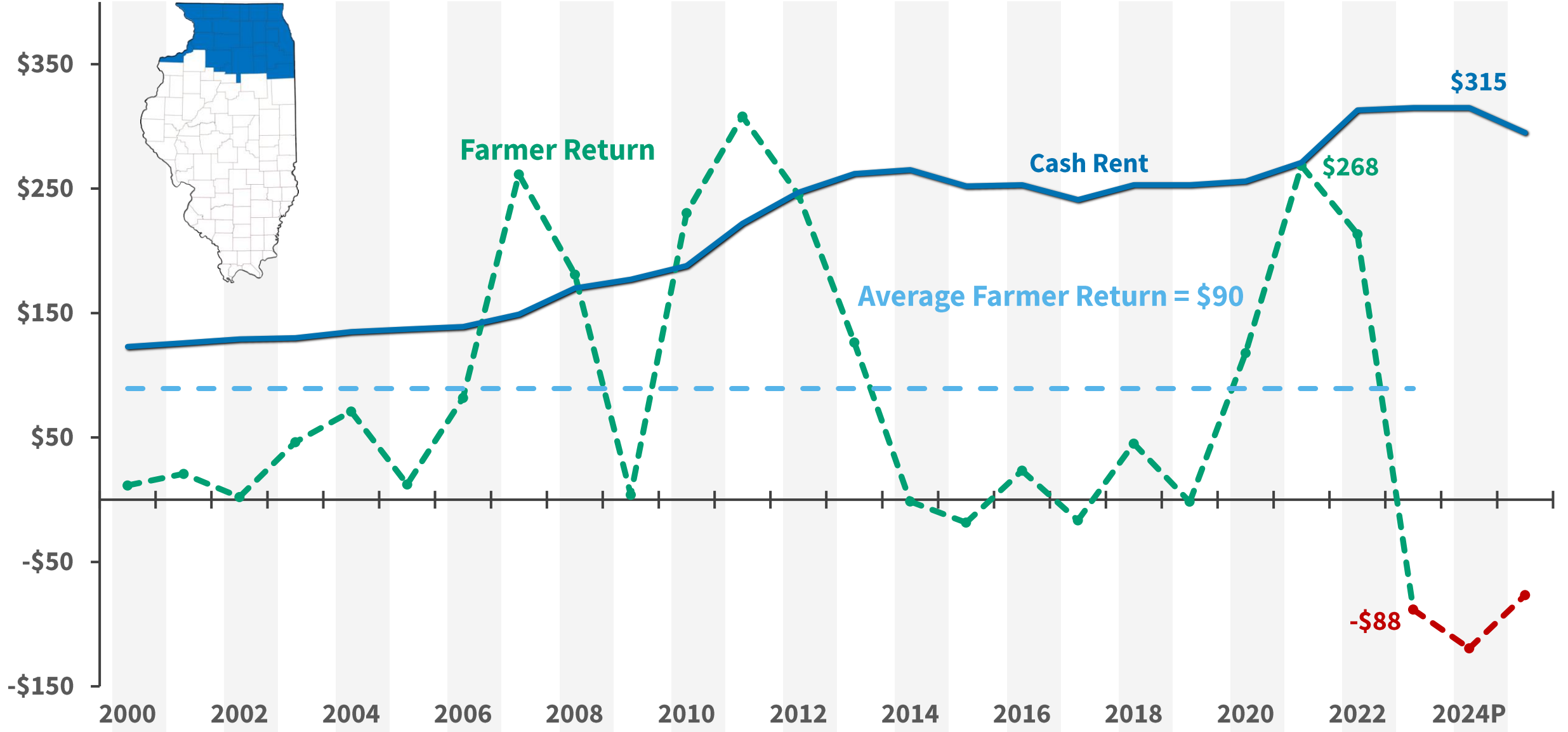
3. Take advantage of available government programs

Land Strategies

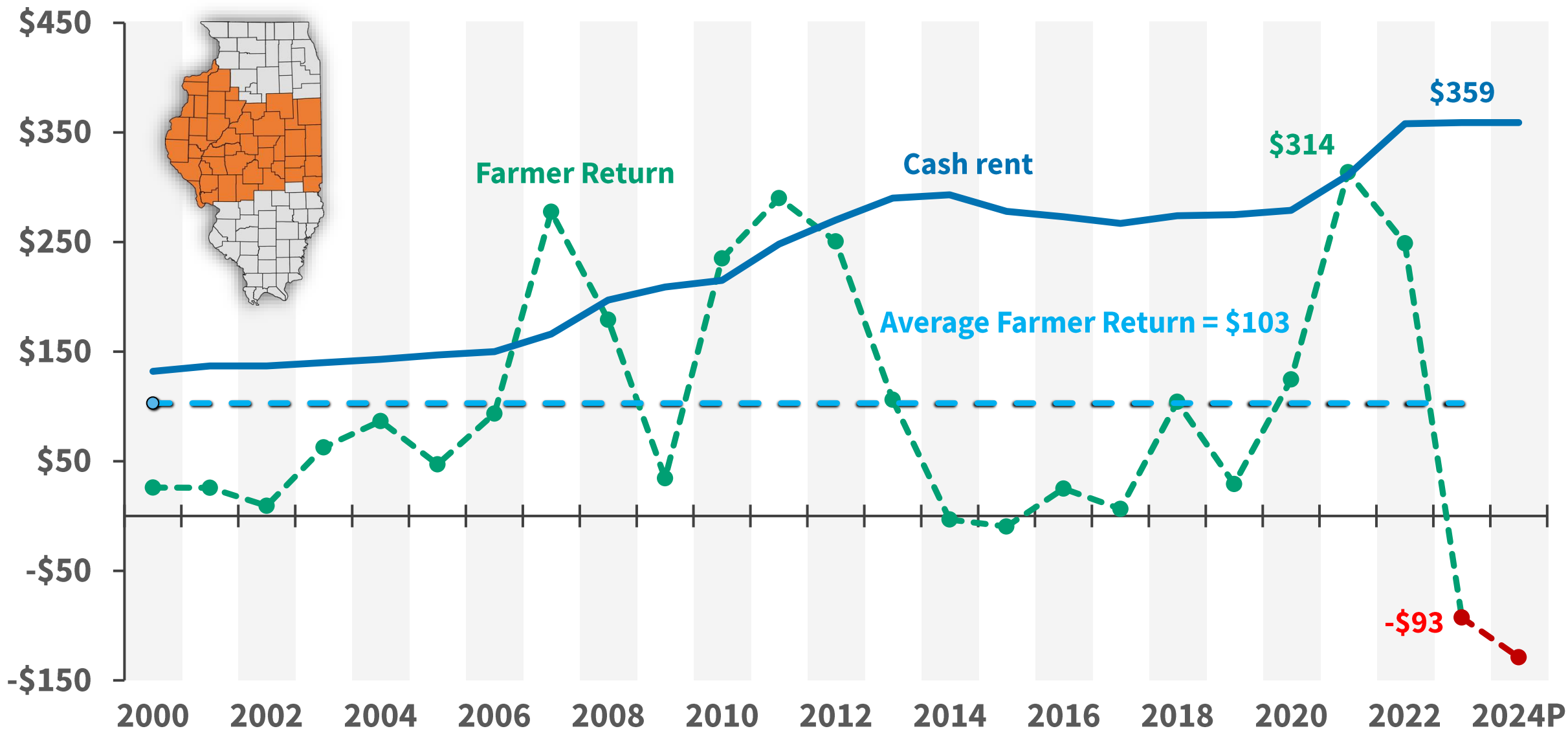
- **Marketing approach:
How is the farm going to
attract new landowners?**
- **Farm resume
and a sales pitch**
- **How much will/can the farmer
pay for cash rent farmland?**



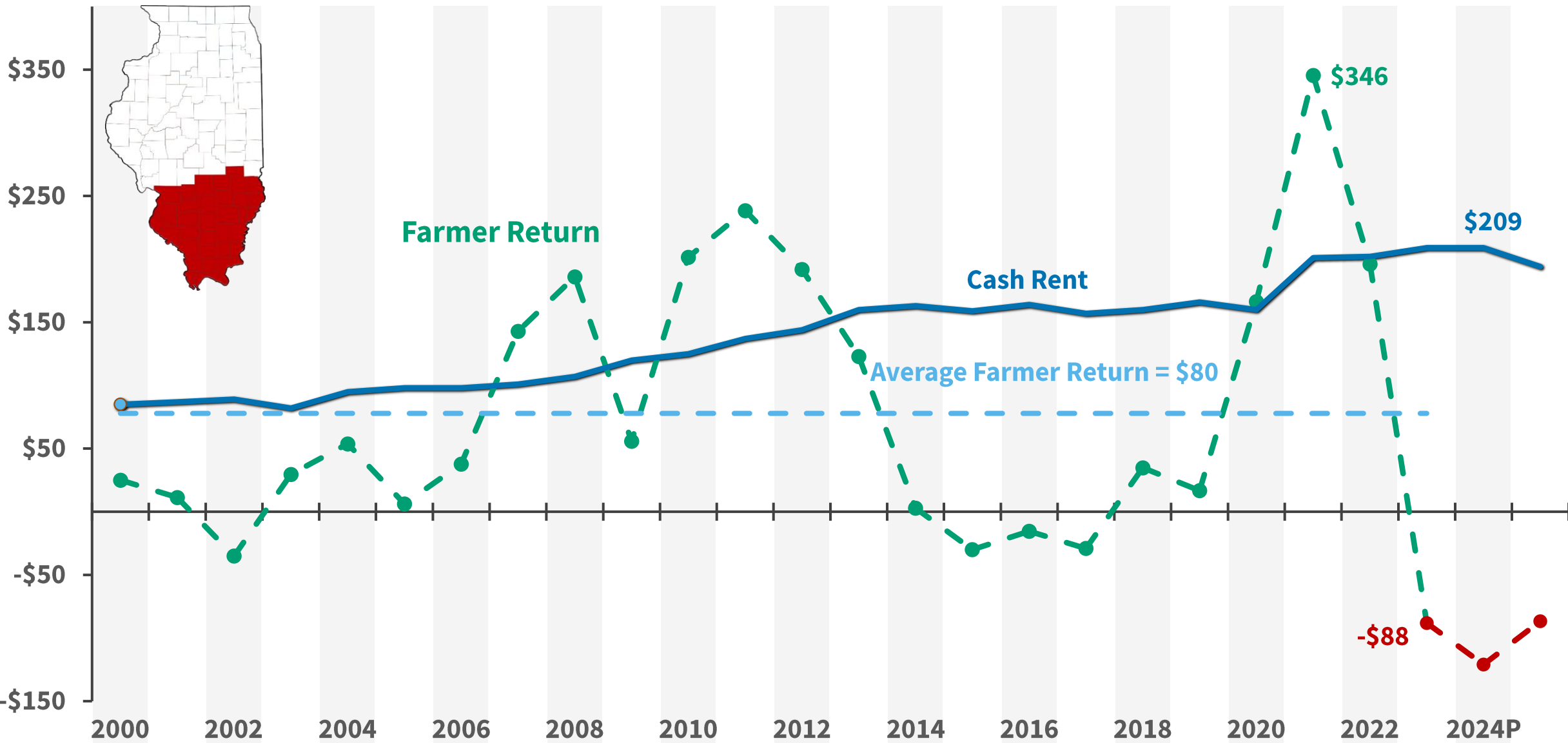
Returns to a 50% Corn – 50% Soybean Rotation in \$ per acre on Northern Illinois, Cash Rented Farmland



Cash Rent and Farmer Returns to a 50% Corn – 50% Soybean Rotation in \$ per acre on **Central Illinois**, High-Productivity Farmland, Cash Rent Farmland



Returns to a 50% Corn – 50% Soybean Rotation in \$ per acre on Southern Illinois, Cash Rented Farmland



Philosophy

Farm for a break-even in most years,
waiting for the high returns in a minority of years
(high-income years 2007-2008, 2010-2012, 2020-2022)

Problem 1:

When will the high-income years happen again?
It could be next year or ten years from now

Problem 2:

Profits are extremely low now and projected to continue

What are you going to do with high rent farmland?

- Established farms with a stable land base (small portion of high cash rent farmland):

Why do this?

- Younger operators relying on more rented land with high cash rents:

How long can this go on?

Strategies

1. Be a low-cost producer

2. Reassess land rental strategies

3. Take advantage of available government programs

Programs

- ARC/PLC
- Crop insurance – likely need high levels, stick with Federally subsidized products:
High-coverage level RP, maybe add ECO
- Ad Hoc federal payments
(e.g., Emergency Relief Program, proposed FARM program)
- Farming practice (Soil Health) payments

Thank you!



Thank You!

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