

MICHIGAN AGRICULTURE TRENDS & OPPORTUNITIES

James E. Byrum

FEBRUARY 20, 2013



HOUSE
COMMITTEE ON
AGRICULTURE



MICHIGAN AGRICULTURE TRENDS & OPPORTUNITIES

- Bio Technology
- Financial Resilience
- Already Planning for 2013
and 2014!



MICHIGAN AGRICULTURE TRENDS & OPPORTUNITIES

- Yields
- Specialty Crop Pressure
- Acreage Coming Out of CRP
- Farming Further North
- Increased Livestock, Dairy and Poultry
Production



MICHIGAN AGRICULTURE TRENDS & OPPORTUNITIES

WORLD POPULATION^{*}

1950	2.5 Billion
2011	7.0 Billion
2050	9.2 Billion



MICHIGAN AGRICULTURE TRENDS & OPPORTUNITIES

2000 – 2010 CONSUMPTION

Global Consumption

	37.3 %	Corn
	28.5 %	Cotton
	48.5 %	Soybeans
	13.5 %	Wheat
	14.5 %	Rice
	19.5 %	Fluid Milk
	5.9 %	Beef
	0.3 %	Pork
	38.8 %	Broilers

U.S. Consumption

	47.2 %	Corn
	59.2 %	Cotton
	1.5 %	Soybeans
	10.0 %	Wheat
	9.6 %	Rice
	14.2 %	Fluid Milk
	4.6 %	Beef
	19.6 %	Pork
	17.0 %	Broilers



MICHIGAN AGRICULTURE TRENDS & OPPORTUNITIES

- 2020
 - 350 Million More Middle Class Households World Wide
 - 49 % of Developing Nations Population



MICHIGAN AGRICULTURE TRENDS & OPPORTUNITIES

Corn	Acres	Yield¹	Production²
1970	1,730,000	81	140,130,000
2010	2,450,000	150	367,500,000
Soybeans			
1970	515,000	26	13,390,000
2010	2,100,000	45	94,500,000
Wheat			
1970	495,000	39	19,305,000
2010	510,000	70	35,700,000
Total Bushels			
1970	2,740,000		172,825,000
2010	5,060,000		497,700,000

¹ bushels/acre ² bushels



MICHIGAN AGRICULTURE TRENDS & OPPORTUNITIES

- Factors Influencing Yield
 - Hybrid Corn
 - Advanced Genetics
 - Better Short Season Varieties
 - Improved Pest Management
 - Improved Crop Nutrition Strategies
 - Climate and Weather



MICHIGAN AGRICULTURE TRENDS & OPPORTUNITIES

- Taking out Fencerows
- Clearing Woodlots
- Fallow Land Back in Production
- Irrigation
- Tile



MICHIGAN AGRICULTURE TRENDS & OPPORTUNITIES

- Specialty Crops
 - Dry Beans
 - Cucumbers
 - Asparagus
 - Apples
 - Cherries



MICHIGAN AGRICULTURE TRENDS & OPPORTUNITIES

- Challenges to Specialty Crops
 - Yield/Profit
 - Labor
 - Risk
 - Lifestyle



MICHIGAN AGRICULTURE TRENDS & OPPORTUNITIES

Commodity	1997	2002	2007
Apples	73,251	50,539	44,189
Tart Cherries	39,131	34,386	37,799
Sweet Cherries	11,345	10,082	9,295
Peaches	7,287	6,326	5,400
Asparagus	18,266	16,157	12,127
Onions	5,067	4,409	4,592
Celery	2,513	2,323	1,968
Carrots	7,080	6,047	5,499
Potatoes	46,105	48,840	42,267
Total Acreage	210,045	179,109	163,136



MICHIGAN AGRICULTURE TRENDS & OPPORTUNITIES

Michigan Dry Beans Planted Acreage*

Year	Acres
1990	350,000
2000	285,000
2010	236,000
2012	198,000

*Source: USDA-NAAS



MICHIGAN AGRICULTURE TRENDS & OPPORTUNITIES

- Factors Impacting Acreage
 - Northern Lower Peninsula
 - Growing Season
 - Better Performing Short Season Varieties
 - Improved Crop Nutrition Strategies
 - Innovation and Technology



MICHIGAN AGRICULTURE TRENDS & OPPORTUNITIES

Year	2010	2015	2020	2025
Total Acreage*1	5,060,000	5,225,000	5,350,000	5,500,000
Total Production*2	497,700,000	608,412,000	773,440,000	874,967,500

*1 Bushels per Acre

*2 Bushels



MICHIGAN AGRICULTURE TRENDS & OPPORTUNITIES

Corn	Acres	Yield¹	Production²
2010	2,450,000	150	367,500,000
2025	2,662,000	250	666,500,000
Soybeans			
2010	2,100,000	45	94,500,000
2025	2,282,500	65	148,362,500
Wheat			
2010	510,000	70	35,700,000
2025	555,500	110	61,105,000
Total Bushels			
2010	5,060,000		497,700,000
2025	5,500,000		874,967,500



MICHIGAN AGRICULTURE TRENDS & OPPORTUNITIES

- Infrastructure Needs
 - Fertilizer Storage and Handling
 - Grain Receiving, Storage and Handling
 - Transportation Needs



MICHIGAN AGRICULTURE TRENDS & OPPORTUNITIES

- Infrastructure
 - Rail
 - Water
 - Roads
 - Utilities
 - Broadband
 - People



MICHIGAN AGRICULTURE TRENDS & OPPORTUNITIES

Truck (doubles)	1,500 bushels
Rail Hopper Car	3,500 bushels
90 Car Unit Train	315,000 bushels
Vessel	600,000 - 750,000 bushels



MICHIGAN AGRICULTURE TRENDS & OPPORTUNITIES

Michigan Licensed Grain Storage Capacity*¹

Year	1990	1995	2005	2010	2012
Storage Capacity* ²	156,102,193	147,442,329	150,000,000* ³	169,167,934	225,830,492
Number of Facilities	349	326	228	221	228

*¹ Source Michigan Department of Agriculture and Rural Development

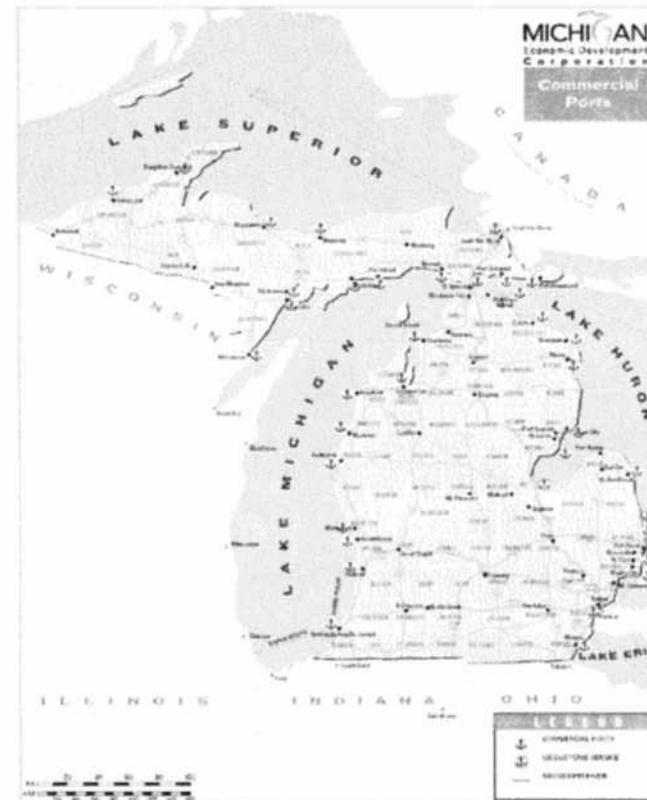
*² Bushels

*³ Estimate



MICHIGAN AGRICULTURE TRENDS & OPPORTUNITIES

- Water
Transportation



MICHIGAN AGRICULTURE TRENDS & OPPORTUNITIES

- Broadband
 - Rural Wireless
 - 4G



MICHIGAN AGRICULTURE TRENDS & OPPORTUNITIES

- Utilities
 - Availability
 - Rates
 - Renewables



MICHIGAN AGRICULTURE TRENDS & OPPORTUNITIES

- Utilities
 - Rates 2008-2012
 - CMS + 30%
 - DTE + 20%



MICHIGAN AGRICULTURE TRENDS & OPPORTUNITIES

- More Yield
- More Acres
- More Production
- More Opportunity



MICHIGAN AGRICULTURE TRENDS & OPPORTUNITIES

TALENT!!!



“STRIVE TO BE WHERE THE PUCK
IS GOING TO BE,
NOT WHERE IT HAS BEEN!”

Wayne Gretzky



James Byrum

Michigan Agri-Business Association

www.miagbiz.org

