Agricultural Technology’s Impacts on Farming and the Rural Midwest

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Chicago, Illinois

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7th District Crop Yield Indexes
(1964=100)

Source: USDA, National Agricultural Statistics Service
Real Cash Crop Prices

($/bushel for Central IL, adjusted by CPI-U for January 2010)

Real net farm income edged up in 2017, but is expected to be down in 2018

Source: USDA, Economic Research Service
Farm loan volume with “major” or “severe” repayment problems in 7th Federal Reserve District (at end of every second quarter)

Source: Federal Reserve Bank of Chicago
### Survey results for October 1, 2018

#### Percent change in dollar value of “good” farmland

*Top:* July 1, 2018 to October 1, 2018  
*Bottom:* October 1, 2017 to October 1, 2018

<table>
<thead>
<tr>
<th>Location</th>
<th>July 1, 2018 to October 1, 2018</th>
<th>October 1, 2017 to October 1, 2018</th>
</tr>
</thead>
<tbody>
<tr>
<td>Illinois</td>
<td>-1</td>
<td>-1</td>
</tr>
<tr>
<td>Indiana</td>
<td>-2</td>
<td>+1</td>
</tr>
<tr>
<td>Iowa</td>
<td>-1</td>
<td>+1</td>
</tr>
<tr>
<td>Michigan</td>
<td>*</td>
<td>*</td>
</tr>
<tr>
<td>Wisconsin</td>
<td>-1</td>
<td>+4</td>
</tr>
<tr>
<td>Seventh District</td>
<td>-1</td>
<td>+1</td>
</tr>
</tbody>
</table>

*Insufficient response.*
Annual change in farmland values in 7th Federal Reserve District

Source: Federal Reserve Bank of Chicago
Interest rates charged on new farm loans in the 7th Federal Reserve District

Source: Federal Reserve Bank of Chicago
As Immigrant Farmworkers Become More Scarce, Robots Replace Humans

An automated harvesting machine at Taylor Farms in Salinas, Calif., uses a high pressure water stream to cut romaine lettuce heads. It replaces a crew of many farmworkers.

Jim Wilson/The New York Times
Traditional ag-related firms are investing in new technologies

CME Forms Data Partnerships with Two Satellite Imagery Companies

7 MAY 2018

DESPITE DOWNTURN, R&D MONEY IS FLOWING INTO AGRICULTURE

“A LOT OF PEOPLE ARE BETTING ON AGRICULTURE RIGHT NOW,” SAYS BAYER’S ADRIAN PERCY.

Deere to Advance Machine Learning Capabilities in Acquisition of Blue River Technology
New players in the digital ag space
Many innovative ag technologies
Agricultural Technology’s Impacts on Farming and the Rural Midwest

- Keynote: Karen I. Plaut, Glenn W. Sample Dean of Agriculture, Purdue University
- Session I: The Role of Agricultural Technology in the Future of Midwest Farms
- Session II: Agricultural Technology’s Effects on Rural Communities
- Session III: The Role of Broadband for Agricultural Technologies and the Rural Economy of the Midwest
- Session IV: Panel discussion – How will new agricultural technologies be implemented and funded?
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