

# iTRAM 2018 Model Update

FORECASTING, MODELING, & TELEMETRICS TEAM –SYSTEMS  
PLANNING BUREAU



## iTRAM 2018 Model Update

The Iowa Statewide Travel Demand Model or iTRAM is undergoing an update

Comparison of iTRAM versions:

Version	Completed	Base Year	Future Year	Geographic Scale
2005_Base	2009	2005	2035	Iowa, Buffer, and Regional
2010_Base	2015	2010	2040	
2018_Base	2021 (expected)	2018	2050	



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## Significant model additions:

- Area-type specific parameters: rural, suburban, and urban
- Greater inclusion of freight commodity flow information
- Time of Day periods
- Post processing options
  - Economic Sensitivity: show the impact of low, medium, and high economic growth
  - Trip Length Assessment: categorize traffic types by local versus non-local/pass-thru
  - Capacity Threshold Assessment
  - High-Cost/Low Volume Assessment

## Model update reasons:

- Continuing support for statewide planning efforts
- Utilize the latest data and software capabilities
- NCHRP "Right Sizing" guide development



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# iTRAM 2018 Model Update

We will continue to support our RPA and MPO partners by

- Supplying freight flow data to/from counties
- Conducting potential development impact scenarios
- Supporting the MPO model with external trip development



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The update will allow us to increase our support by

- Supplying more realistic freight flows
  - FAF 4 data has been adjusted for the "true origin"
- Integrating the rail and road network models
  - Allows for flow-based assignments rather than the standard QRFM method
  - Better assignment of cross-country Iowa related trips
- Be able to measure our system for performance/projects in new ways

Mode	Commodity	Value	Volume	Weight	Value	Volume	Weight
All	Total	1,149	1,122	1,122	1,149	1,122	1,122
	Other	1,149	1,122	1,122	1,149	1,122	1,122
	Other	1,149	1,122	1,122	1,149	1,122	1,122
	Other	1,149	1,122	1,122	1,149	1,122	1,122
Road	Total	1,149	1,122	1,122	1,149	1,122	1,122
	Other	1,149	1,122	1,122	1,149	1,122	1,122
	Other	1,149	1,122	1,122	1,149	1,122	1,122
	Other	1,149	1,122	1,122	1,149	1,122	1,122
Rail	Total	0	0	0	0	0	0
	Other	0	0	0	0	0	0
	Other	0	0	0	0	0	0
	Other	0	0	0	0	0	0



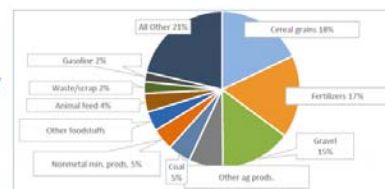
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Most Common analysis requested from this group

- Commodity Flows by County
  - Multiple modes
  - Domestic and International
  - FAF model base, interim, and future years
  - 43 SCTG commodity codes
  - Tonnages and values
- Analyses can differ in scale and complexity
  - Examples
    - MIDAS Council of Governments 2019-2309 LRTP
    - DMATS LRTP Amendment, WSP and CPCS Transcom Inc.

Commodity	2007	2015	2040
Cereal Grains	27,553	31,353	43,039
Animal Feed and Products of Animal Origin	4,364	5,169	7,682
Gravel and Crushed Stone	3,726	4,125	5,376
Other Agricultural Products	2,110	2,673	4,434
Live Animals and Fish	1,631	2,023	3,245
Nonmetallic Mineral Products	1,431	1,769	2,825
Waste and Scrap	1,018	1,135	1,502
Natural Sands	851	1,057	1,674
Fertilizers	718	717	0
Other Prepared Foodstuffs, Fats and Oils	708	811	1,131
Other Chemical Products	0	0	1,004
<b>TOTAL</b>	<b>44,220</b>	<b>50,860</b>	<b>73,903</b>

Figure 11.7: Total Eight County Region Tonnage by Commodity Type, 2014  
Source: WSP Analysis of FHWA Freight Analysis Framework version 4 (FAF4) data.



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For Questions and Information, please contact:



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