

A large wind turbine stands prominently in the foreground on the left, its three blades reaching towards a clear blue sky. The turbine is white with red tips on the blades. In the background, several other smaller wind turbines are visible, scattered across a vast field of golden wheat. The field is divided by a narrow dirt path that leads towards the horizon. The overall scene is bright and clear, suggesting a sunny day.

# An Independent Analysis of Logistics Parks for Wind Energy Manufacturers and Suppliers

Performed by:



May 2011

TranSystems performed an objective comparison of Midwest logistics parks that cater to the wind energy sector. The purpose of this study is to offer wind energy manufacturers and suppliers cost-effective options for their future facility locations. This study modeled seven key factors and weighed the results to rank the sites that best minimize distance and transportation costs to this audience. The most highly rated future facility location would offer the least costs of transportation logistics and manufacturing due to location and other factors.

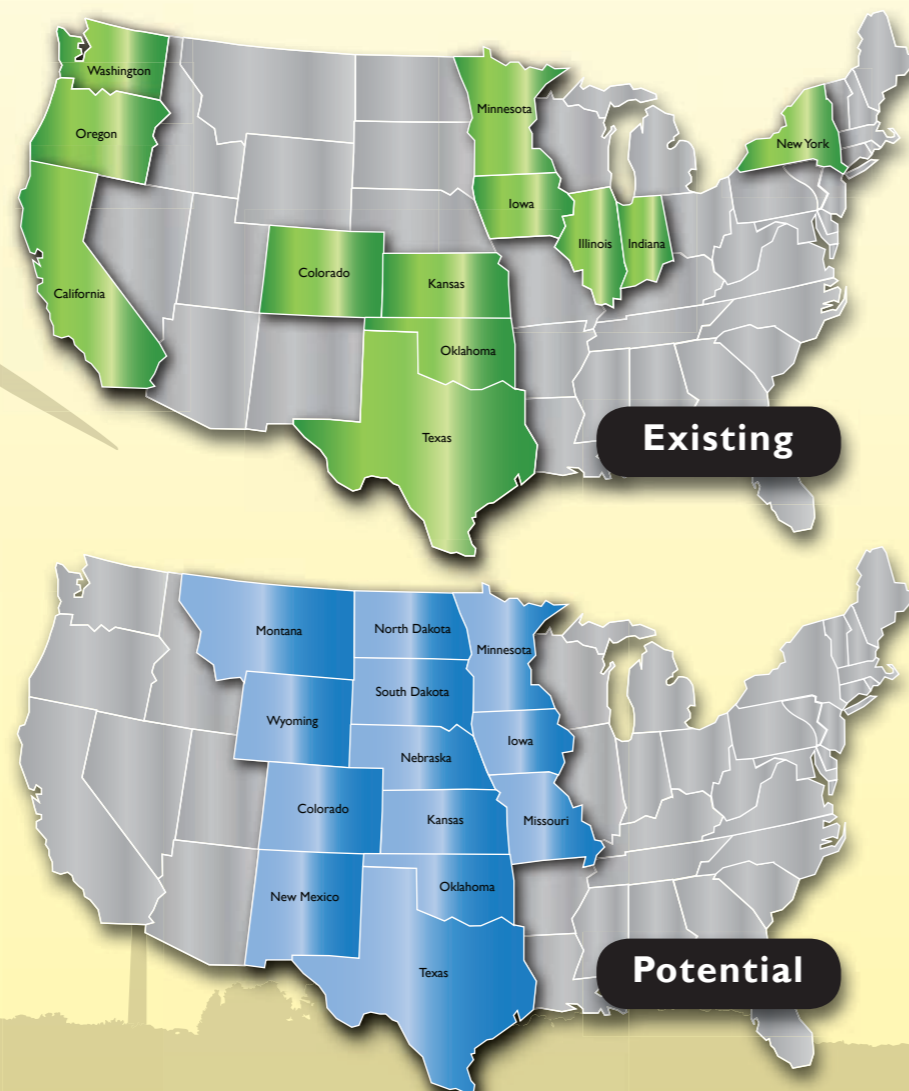
What are the key factors to consider when evaluating a future facility site?

- **Proximity to Wind Resources** – Locations that offer a combination of the lowest transportation costs with the lowest facility and operations costs are best suited for equipment manufacturers and suppliers. Future facility locations should be near the areas with the most wind resources.
- **Wind Power Capacity** – The study consulted with the National Renewable Energy Laboratory (NREL) to rank all states by Potential Capacity and Existing Capacity for MW generated by wind. The states that ranked highest will likely have more wind farms and thus more need for equipment in the future.

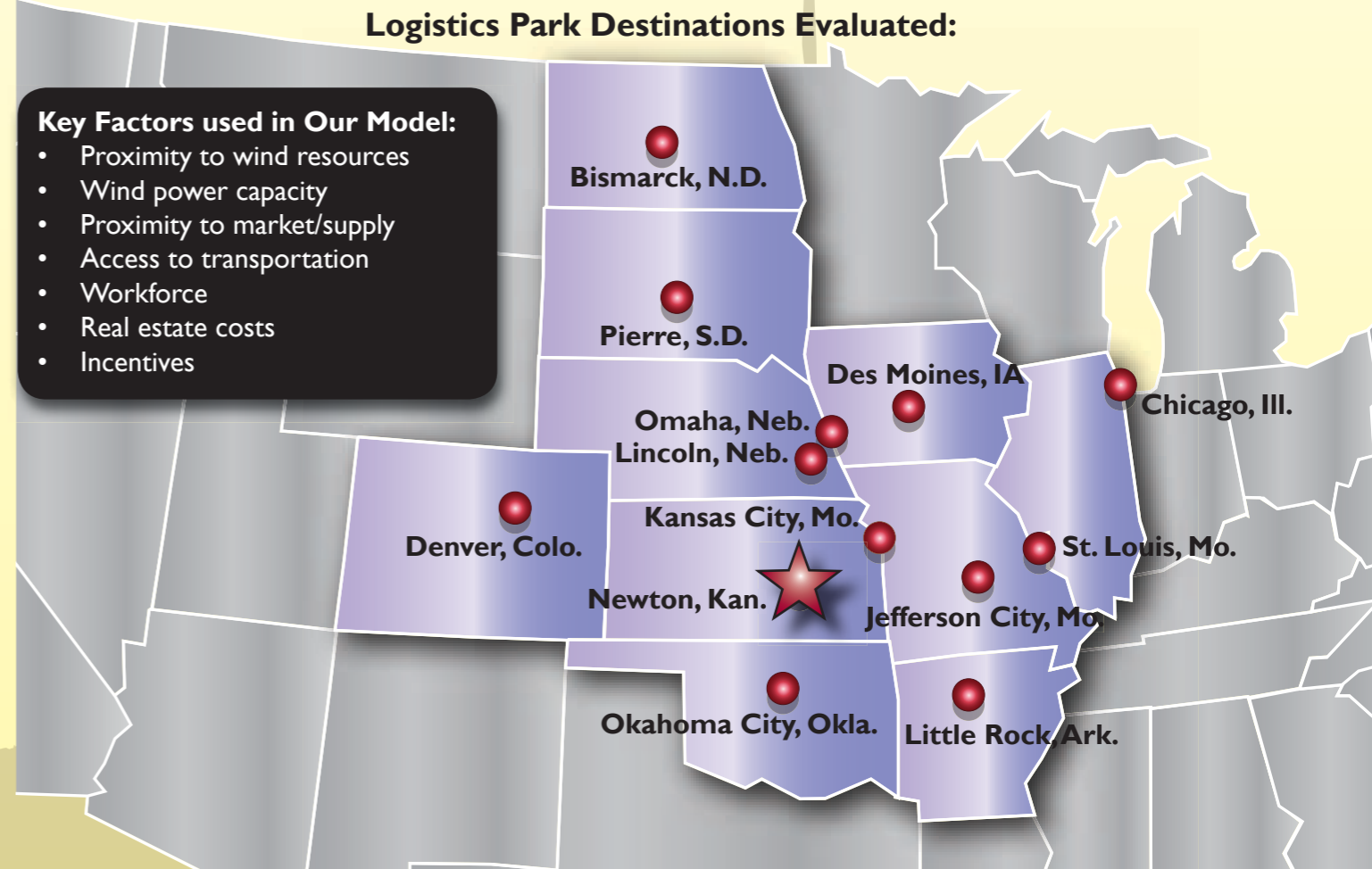
- **Proximity to Market/Supply** – A central location that is near wind farms, transportation infrastructure and manufacturing resources is important. Manufacturers using “just-in-time” production can help reduce fees associated with shipping delays and ensure the most efficient means of providing products to the end user.

- **Access to Intermodal Transportation Infrastructure** – Transportation from manufacture to destination comprises the majority of wind energy equipment costs. Access to intermodal facilities is important in transport to help reduce shipping time, facilitates movement from one mode of transportation to another and helps to reduce transportation costs. The ideal location would have ready access to waterway, rail and highway transportation with intermodal centers situated along major routes to wind farms.

### Top States in Wind Power Capacity



### Logistics Park Destinations Evaluated:



- **Skilled Workforce** – Situating your business in a location that has a ready, skilled manufacturing workforce available can help reduce new business startup time in the areas of staff recruiting and training. Other things to consider for the livelihood of future employees are working and living in an area with a low crime index and low cost of living.
- **Low Costs** – Selecting a site with low real estate costs can give you the most warehousing and storage for your square foot cost. Due to the enormous size of many wind facility components, it is important to consider the amount of space currently needed, as well as expansion capability to enable inventory storage and shipping needs.
- **Incentives** – State and federal grant and loan programs will continue to be available in the near future to aid wind energy companies, manufacturers and suppliers, making it a lucrative time for new businesses in certain states.

### Recommendation

TranSystems’ study evaluated the seven factors necessary for successful wind energy manufacturing business startup for each of the 13 logistics park destination cities. Using a centroidal analysis model, each factor for each city was weighted to determine the best site that minimizes distance and transportation cost to wind power capacity and to manufacturers.

The study recommended **Newton, Kan. as the top overall location for future wind power manufacturing facilities.** Located in the heart of the North American Wind Corridor, Newton, Kan. offers a central location and ready transportation infrastructure to provide convenient and economical access to the regions with the greatest wind energy activity. Ranked second in the nation for wind energy potential, Kansas has more than 1,000 MW of wind generating capacity, with projected expansion to 7,000 MW by 2030. In addition, the state’s skilled workforce, low real estate costs and state incentives make it an attractive destination for manufacturers.

### Most Cost Efficient Transportation Modes

1. Barge/waterways
2. Rail
3. Highways/truck
4. Air

# Statistics for the Kansas Logistics Park Newton, Kan.

<b>Acres Available</b>	400 initially; expandable to 1,500
<b>Distance to Interstate</b>	2 miles east of I-135 ; 30 miles north of I-35
<b>Distance to Highway</b>	Adjacent to US Highway 81 and US Highway 50
<b>Ownership</b>	City of Newton 66%; Harvey County 34%
<b>Nearest Intermodal Facility</b>	Edgerton, Kan.,
<b>Zoning</b>	Industrial
<b>Topography</b>	Flat
<b>Distance to Waterway</b>	220 miles to Port of Catoosa, Tulsa, Okla.
<b>Distance to Rail</b>	Adjacent to Watco shortline railroad Watco serves two Class I railroads (Union Pacific, BNSF)
<b>Airport</b>	2 miles to Newton City/County Airport (EWK) 32 miles to Wichita Mid-Continent Airport (ICT) 197 miles to Kansas City International Airport (MCI)
<b>Incentives</b>	Kansas enacted a financial incentive for eligible wind and solar equipment manufacturing projects that authorizes up to \$5 million in bond financing for eligible projects. Additional cost savings are offered to expanding businesses through the elimination of property tax on new business machinery and equipment, as well as income tax credits, sales tax exemptions and financial assistance for training.
<b>Utilities</b>	Gas, Electric, Water/Sewer, Telecommunications

For more information please contact:



**Troy West, PE**  
(419) 842-2210

[tjwest@transystems.com](mailto:tjwest@transystems.com)

**Jeff Lackey, PE**  
(316) 303-3000

[jrlackey@transystems.com](mailto:jrlackey@transystems.com)