Preliminary Assessment of the Economic Impact of the Proposed Ames Intermodal Facility

An Analysis of the Campustown Site

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About the Authors

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Orazem and Otto have collaborated on past research involving Midwest labor markets and economic development policy. Their joint research has appeared in the *Journal of Regional Science* and the *American Journal of Agricultural Economics*.

Introduction and Purpose

This paper presents a preliminary assessment of the potential economic impacts associated with the development of a transportation intermodal facility in the Campustown area of Ames, Iowa. Ames is the largest city in Story County, Iowa with a population of over 56,000 and is home to Iowa State University (ISU) one of the world's leading educational institutions. With its 27,000 students and 14,000 faculty and staff, ISU plays a major economic role in the Ames community and the central Iowa region. The Ames/ISU community is located just 40 miles north of Des Moines, the state capital of Iowa and the state's largest city.

The proposed intermodal facility is to be a focal point that allows passengers to transfer between different modes of travel including personal automobiles, intercity buses, airport shuttles, bike and foot traffic, and local transit service. The facility is also to serve as peripheral parking for the ISU faculty, staff, and students. This peripheral parking will be connected to the campus via a special shuttle bus service. As ISU's campus master plan seeks to push parking to the fringe of the campus, the facility will allow the development of educational buildings in lieu of surface parking on the main campus. Finally, the intermodal facility is also to include a park and ride function where travelers can leave their automobiles and transfer to one of the transit options at the facility for the final segment of their trip. Enabling efficient, multimodal transfers provides greater access to the community and beyond as well as support important economic development goals of both ISU and the City.

The proposed Intermodal Facility will be located in the Campustown area of Ames. It would accommodate up to 750 parked vehicles, contain passenger waiting and information facilities as well as ancillary retail space and offices for ISU's parking and police departments.

The Campustown site is located on ISU property, just south of Lincoln Way and within walking distance of the main campus. Campustown is an eclectic blend of retail, restaurant, and office uses and has long been the discussion for redevelopment. The development of an intermodal facility in this area is expected to be a catalyst for this redevelopment. This paper assesses the economic impact of this facility in generating new jobs and opportunities in the Campustown area.

This paper first discusses the short term and long term direct benefits of the facility. Next, the paper focuses on induced economic benefits created by the project. In the short term, the project is expected to generate $55 million in sales and slightly more than 500 jobs. The long term impact of the project shows similar results.

Direct Economic Benefits

This discusses the potential short term and long term benefits generated by the development of a transportation intermodal facility in the Campustown area of Ames.

Short term Benefits

Employment will be generated in the near term as a result of the construction of the $40 million Intermodal Facility. The construction of the facility will generate 345 construction jobs along with 160 secondary jobs and will generate an additional $12.3 million dollars of economic activity.

In addition, the 2008 *Campustown Study*[1] projects that the existence of adequate parking and the increased foot traffic associated with a transportation hub adjacent to Campustown will spur the additional construction of 75,765 square feet of office space that will house some University staff as well as private businesses with operations complementary with activities on campus. The *Study* envisions replacing the existing retail space with upgraded retail space surrounding an attractive plaza with walkways and water features. The aggregate impacts of the construction are estimated to be $55.4 million of total output with $20.4 million of new income and generating 505 total jobs. The breakdown of short term job creation by sector is shown in Table 1 below.

Table 1: Short Term Economic Impact of Campustown Construction, Ames, Iowa

Sectors	New Jobs	Labor Income	Total Sales	Value-Added
Agriculture	0.2	$3,566	$37,080	$14,597
Transportation and Utilities	3.4	$194,086	$687,385	$600,000
Construction	348.1	$15,084,099	$40,151,516	$16,618,112
Manufacturing	9.6	$489,773	$2,076,511	$650,482
Wholesale and Retail Trade	39.4	$1,155,534	$2,792,972	$1,863,671
Business Services	42.6	$2,160,811	$4,277,504	$2,285,170
Finance, Insurance and Real Estate	16.8	$453,844	$2,902,200	$1,900,021
Other Services	42.9	$718,371	$2,068,489	$954,527
Government	2.3	$167,434	$377,836	$207,486
Total	505.1	$20,427,517	$55,371,493	$25,094,066

Source: IMPLAN Model for Story County, Iowa

Long term Benefits

Ultimately, the success of the Intermodal Facility in generating jobs will depend on the new business opportunities fostered by proximity to the hub. Projections based on the *Campustown Study* suggest that a fully occupied office and retail complex will add a permanent net increase of 300 professional jobs. The presence of the parking supplied by the Intermodal Facility is cited by the Campustown Study as important in the area's redevelopment. Our scenario allocated jobs into investment and financial services ($71,000 annual average salary), scientific research ($50,060 annual average salary) and business services ($37,900 annual average salary). This added direct increase in business activity will generate an additional change of 185 indirect jobs. These direct and indirect increases represent a permanent 1% growth in Story county employment. Approximately 168 of these additional jobs will be part-time work in the retail, wholesale and service areas. Having such a large influx of part-time jobs across the street from campus will be a tremendous boost for college students, 53% of who work part-

[1] *Campustown Study*, RDG Planning & Design, 2008.

time in support of their studies at Iowa State University. While these jobs will not be high-paying, they will help lead to high-paying careers as these students graduate and enter full-time employment.

The breakdown of long term job creation by sector associated with induced expansion and improvements in property in the vicinity of the transportation hub is shown in Table 2.

Table 2: Long Term Economic Impact of 300-employee Campustown Business Park, Ames, Iowa

Sectors	New Jobs	Labor Income	Total Sales	Value-Added
Agriculture	0.4	$4,557	$49,765	$20,558
Transportation and Utilities	3.5	$184,573	$585,227	$790,393
Construction	5.2	$219,835	$516,470	$257,783
Manufacturing	3.8	$193,776	$815,489	$240,728
Wholesale and Retail Trade	32.3	$820,098	$1,934,911	$1,305,464
Business Services	248.4	$10,829,845	$23,399,090	$11,836,866
Finance, Insurance and Real Estate	135.4	$8,043,366	$22,407,894	$10,119,131
Other Services	52.0	$842,648	$2,476,292	$1,119,755
Government	3.5	$253,302	$548,686	$304,045
Total	484.5	$21,391,999	$52,733,825	$25,994,721

Source: IMPLAN Model for Story County, Iowa

Induced Long term Economic Impacts

This section discusses the long term tangible and intangible economic impacts of the proposed intermodal facility.

Biorenewable Complex and Campus Development

As one of the goals of the Intermodal Facility is help move parking from the core to the fringe of the main campus, the facility provides for a higher and better use of campus land. One such development is the proposed Biorenewable Complex which will house a biorenewables research laboratory (BRL) as well as space to consolidate the University's Agricultural and Biosystems Engineering (ABE) department.

ISU's Agricultural and Biosystems Engineering is a nationally and internationally known department that has seen unprecedented growth in recent years in terms of undergraduate and graduate enrollment, research output, and critical outreach programs. The Department's mission is to serve, through education, research, extension and service, the agricultural industry. The department develops and transfers engineering and related technological knowledge for efficient production of food and fiber to citizens in Iowa, the nation, and the world, while wisely managing natural resources.

The BRL portion of the complex will also be dedicated to biorenewables research, education and outreach. Space includes shared experimental facilities in areas that support research in biorenewables, including production and processing of biomass. The building will serve the needs of researchers from

different disciplines and encourage highly productive, collaborative, and integrated projects, serving as a hub for Biorenewables activities across the university. The building is programmed to provide lab space that can be tailored both to the research of new faculty as well as to the changing needs of research in a rapidly evolving field. The BRL with the ABE department supports the University's *Bioeconomy Initiative*.

The Bioeconomy Initiative is an integrated, university-wide effort involving faculty and students from colleges and programs across the university – biology, agriculture, engineering, computer science, chemistry, and social sciences have actively collaborated for the last five years, which has helped bring ISU's Bioeconomy Initiative to its current level of excellence. By providing state-of-the-art equipment and expertise, a new research building will provide the infrastructure that these bioeconomy programs need to open up new intellectual frontiers.

The total building complex will contain about 124,000 net square feet and just over 218,000 gross square feet and includes administrative, faculty and graduate student offices, research laboratories and the necessary shared experimental support spaces, a common teaching lab, and interaction and display areas, classrooms, teaching laboratories, library, student activity spaces, and common space. The overall complex will support 107 total Full Time Equivalent (FTE) staff including Faculty/Staff and 151 graduate students/student assistants.

The Intermodal Facility will support the eventual development of the Biorenewable Complex and other campus development by providing for fringe parking in lieu of parking on the campus itself. In this way, the facility supports the campus master plan. It is difficult to quantify the economic value of this relationship, though it makes sense that the development of the ISU main campus will benefit from the Intermodal Facility increasing the University's impact on the city, state, nation and the world.

Ames Convention and Tourist Business

Ames, the 2008 *Iowa Tourism Community of the Year*, generates considerable convention business. In 2008, conventions were responsible for 56,938 hotel rooms in Ames at an average daily rate of $80. The Travel Federation of Iowa estimates that travel parties spend an additional $100 for food, entertainment and retail. That suggests that Ames generates a total of $10.2 million per year in convention business. The Ames Convention and Visitors Bureau estimates that 80% of the convention business is associated in some way with Iowa State University. Campustown is not currently a draw for convention visitors which limits shopping by attendees around the campus. An attractive retail/restaurant center adjacent to campus would increase the average dollars spent by convention visitors. An attractive Campustown coupled with the added convenience of a transport hub which offers easier access to and from the Des Moines airport and to and from other cities via intercity busses would make Ames more competitive in attracting new convention business to the community. Adding an improved intra-city shuttle loop that links Campustown to now difficult to access amenities such as the University's Grant Wood murals in the library or the Brunnier Art Museum on central campus will also improve the city's attractiveness as a convention spot.

The same factors would improve Ames' attractiveness for nonconvention visits to Ames. Convention business is responsible for 20-25% of total overnight stays in Ames. This suggests the total visitor spending from all sources is between $40-$50 million per year. The Ames Convention and Visitors Bureau estimates an improved Campustown and the improved intercity transportation links resulting from the transport hub would increase visitor and convention business by about 3 percent. Assuming conservatively that restaurant, hotel and retail business would increase 2.5% from the lower-bound base of $40 million in visitor sales, direct and indirect benefits are an additional $1.35 million generated

from additional visitor spending in Ames associated with an improved Campustown/transport hub. This is almost certainly an underestimate as an improved Campustown for destination shopping and eating would increase the likelihood that alumni and friends of the University who attend football and basketball games will spend more time in Ames after games, resulting in added visitor spending. Our lower-bound estimate is that additional spending translates into 21 jobs and about $367,000 of additional personal income, mostly in retail and service sectors. Again these jobs will be increasing opportunities for college students to pay for their schooling, improving access to the high-paying careers associated with a college degree.

Table 3: Economic Impact of Increased Convention and Tourism, Ames, Iowa

Sectors	New Jobs	Labor Income	Total Sales	Value-Added
Agriculture	0	$183	$2,349	$961
Transportation and Utilities	0.1	$6,513	$26,566	$26,900
Construction	0.1	$4,123	$9,666	$4,674
Manufacturing	0.2	$7,390	$33,308	$8,790
Wholesale and Retail Trade	2	$45,741	$269,187	$70,089
Business Services	0.8	$33,460	$82,434	$50,038
Finance, Insurance and Real Estate	0.5	$11,476	$74,405	$33,984
Other Services	17.5	$243,440	$832,006	$388,467
Government	0.2	$14,898	$27,081	$17,445
Total	21.4	$367,226	$1,357,002	$601,348

Source: IMPLAN Model for Story County, Iowa

Quality of Jobs

As indicated above under the long term benefits, the presence of the Intermodal Facility with its supply of parking for Campustown would support the area's redevelopment. About 300 of the jobs anticipated to be part of this redevelopment would be professional occupations with annual salaries of between about $40,000 and $71,000.

Collateral benefits

The planned transportation hub will foster numerous improvements to the transportation flows within Ames and between Ames and other cities that will improve quality of life. These will also have associated economic rewards that are more difficult to quantify, but merit mention.

1) Bike and pedestrian paths: The planned transportation hub has an added objective of creating a link between Iowa State University, Campustown, The Arboretum, and the existing bike/walk path along College Creek. The Arboretum is a European style public green space that is underutilized because there is no link with the ISU campus. In renovating Campustown and building the transportation hub, plans call for extending the existing bike/walk path through the Arboretum, along the College Creek , and through Campustown to the Campus. The resulting path would allow individuals to commute to Campus by bicycle from the outskirts of West Ames with only four road crossings, a distance of about

2.5 miles. It will also provide a green walkway that connects the Campus to the Arboretum in what is certain to become a heavily used accessible path for commuters, joggers and walkers.

2) College Creek upgrades: College Creek exits the arboretum but is channeled down an overgrown ravine for a block before being buried in a storm sewer under Campustown. It reemerges on campus as a beautiful lake that feeds a small clear stream that meanders through campus. This project will provide an opportunity to upgrade the banks of the Creek, extending the beauty of the Arboretum all the way through Campustown to the University.

3) Vanpool systems and Intrametro commuting: Census figures estimate that 20% of Story County residents now work in Polk County while almost 10% of Ames employees live in Polk County. There is a large pool of commuters going each direction between Ames and Des Moines. The transportation hub provides a location for Park and Ride van services from Ames to Des Moines, and it provides the terminus of vanpools from Des Moines to Ames. With roughly 22% of all jobs in Story County located on the Iowa State campus, the transportation hub is the perfect terminus for commuters wishing to use group commuting services from Des Moines.

4) Intercity Carrier System: The intercity carriers who would use the facility have stated that they would expect to see a 10 to 20 percent increase in ridership with a Campustown location.

Summary of Economic Impacts

The above tables are condensed and summarized in Table 4 below. Considering long term direct and induced benefits, the Intermodal Facility is expected to annually generate about $54 million in long term sales, $21 million in labor income and just over 500 jobs.

Table 4: Summary of Economic Benefits

Factor	Total Sales	Labor Income	New Jobs
Short Term Tangible Benefits			
Direct/Indirect Short Term (Construction)	$55,371,493	$20,427,517	505.1
Long Term Direct Employment Benefits			
Direct/Indirect Long Term	$52,733,825	$21,391,999	484.5
Visitors and Conventions	$1,357,002	$367,226	21.4
Total Long Term Benefits	$54,090,827	$21,759,225	505.9
Intangible Benefits			
Biorenewable Complex	*Moves some on campus parking to off campus*		
Quality Jobs	*High paying jobs as part of redevelopment*		
Collateral Benefits	*Bike/ped connections, long distance commuters*		

Source of Tangible Benefits: IMPLAN Model for Story County, Iowa