USDOT TIGER USDOT TIGER USDOT TIGER USDOT TIGER USDOT TIGER

Grant Application

Ames Intermodal Facility

Supporting *Campustown* Redevelopment

September 10, 2009

CyRide

TABLE OF CONTENTS

PROJECT SUMMARY

Project Type: Other - *Intermodal Facility (transit stop, intercity bus terminal, pedestrian-bicycle corridor/trailhead, retail and office commercial development, vanpool/carpool parking, public facilities, public safety facilities)*
Project Location: Ames, Iowa
Congressional District: Iowa District #4, Story County
Small Urban Area: Ames, Iowa Metropolitan Area
TIGER Request: $39,299,850

CONTACT INFORMATION

The primary point of contact for the TIGER application will be the Ames Transit Agency (CyRide), the designated transit recipient for the Ames, Iowa community as indicated below; however, the project partners and stakeholders in the facility are listed as well.

Applicant Organization:	City of Ames/Ames Transit Agency (CyRide)
Contact Name:	Sheri Kyras, Transit Director
Address:	1700 University Blvd., Ames, Iowa 50010
Telephone Number:	(515) 239-5563
Email Address:	skyras@cyride.com

PROJECT PARTNERS AND STAKEHOLDERS

Project Partners: CyRide, City of Ames, Iowa and Iowa State University

Project Stakeholders:
Campustown Business District
HIRTA/Heartland Senior Services (Disabled/Elderly)
Jefferson Lines
Burlington Trailways
Executive Express
Ames Taxi
Nighthawk Cab

Ames Intermodal Facility TIGER Grant By The Numbers		
Public Partners	3	
Local Private Stakeholders	8	
Congressional Support	3	
Additional Community Support Letters	12+	
Local Funds Invested	$4.3 million (10%)	
TIGER Request	$39.2 million (90%)	
BCR on One Time $39.2 Million Federal (25 Year Period)	3% Disc. Rate	7% Disc. Rate
	$302 Million BCR = 9.07:1	$176 Million BCR = 6.03:1
Long-Term New Jobs from New Development	300 Direct 205 Indirect 505 Total	
Annual Added Income From One Time $39.2 Million (Long-Term)	$21.759 Million	
Reduction in Annual CO_2e	624 Tons	
Reduction in Annual VMT	1,782,871	
Gallons of Fuel Saved/Year	67,894	

PROJECT DESCRIPTION

PROJECT OVERVIEW

Approximately five years ago, the Ames community developed a transportation vision for the community to link various forms of transportation in Ames so that residents, students, faculty and visitors could seamlessly transfer between modes of travel within the city, region and nation, and further that this connected transportation system additionally spur Transit Oriented Development near this facility that would create economic development in Ames and Central Iowa. With this desire came preliminary planning on the concept; however, this small urban city in a rural state lacked the financial means to make this vision a reality. The TIGER grant program can provide the vehicle to make these connections happen and can provide the catalyst to stimulate the Central Iowa community.

With the economic stimulus funding through TIGER, the three project partners, City of Ames, CyRide and Iowa State University, propose to construct and operate an Intermodal Transportation Facility in Ames, Iowa, at a total project cost of $43,366,650 to make this vision happen. Ames is one of Iowa's fastest growing cities and is home to the campus of Iowa State University of Science and Technology, a land-grant university with an enrollment of

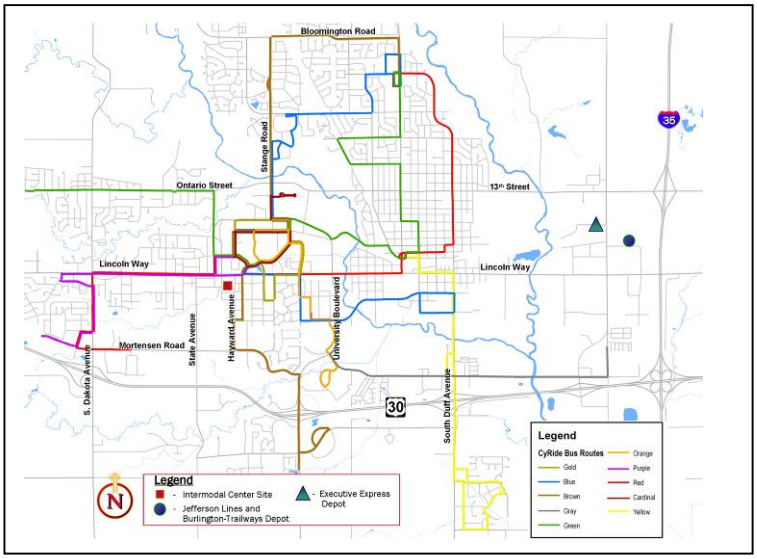
approximately 27,500 students and employment of over 6,000. The proposed Intermodal Facility would accommodate and link public and private transportation modes (public transit, intercity bus carriers, regional airport shuttle services, carpools/vanpools, taxis, bicycle commuters, and pedestrians) for the residents, students, facility and visitors of Ames and the Central Iowa region by providing the following:

- Bus bays for the two public operators in the region - CyRide and Heart of Iowa Regional Transit Authority (HIRTA)
- Bus bays and passenger waiting area for private operators in the region and nation – Jefferson Lines and Burlington Trailways that serve the region and provide interstate connectivity/mobility throughout the nation and a regional, airport shuttle services to/from the Des Moines International Airport.
- Taxi stands for the two local private companies providing 24-hour per day service.
- Shared parking for the University, for the Campustown Business District, residence halls located proximate to the facility site, parking for the ISU Department of Public Safety (Police Division and Parking Division), and adjacent residential areas and institutional activities that consistently experience moderate to severe parking shortages.
- Office space for the ISU Department of Public Safety.
- Retail space in support of the Campustown redevelopment proposal and patrons of the facility.
- Bike path connect to existing trails in Ames and bike lockers at the facility
- Locker room and public restroom space in support of the Campustown redevelopment proposal and as an amenity extending the range of bicycle commuting within the community.
- Enhancements to the limited amount of existing green space in the area.

THE AMES COMMUNITY'S VISION REALIZED THROUGH THIS PHOTO SIMULATION OF THE INTERMODAL FACILITY ON THE PREFERRED SITE

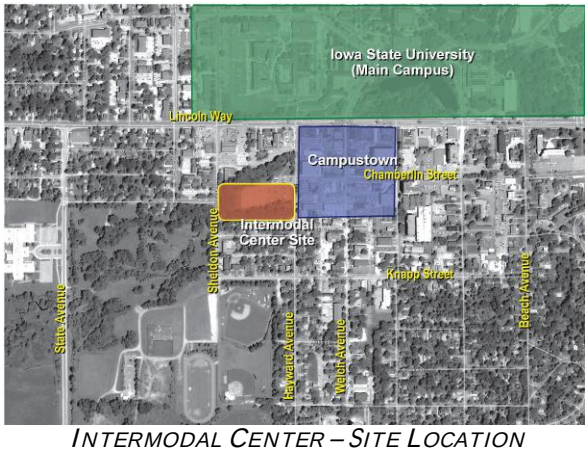
Intermodal Facility Site – Geospacial Data

Currently, transportation functions in Ames are disjointed without access to private carrier services located in the east fringes of Ames, more than 2 miles from an existing public transit route and are located in an industrial area as illustrated in the map to the right. The preferred site will not only coordinate these transportation services in one location, but locate it next to services such as restaurants, convenience stores, etc. needed by riders utilizing these services.



LOCATION OF INTERCITY/REGIONAL TRANSPORTATION PROVIDERS IN RELATION TO CYRIDE ROUTES AND INTERMODAL FACILITY

The preferred site is located at the intersection of Hayward Avenue/Chamberlain Street, within the city of Ames Redevelopment District of Campustown. The Campustown site was selected through an exhaustive multiple site feasibility assessment involving Iowa State University, the City of Ames, CyRide, the Government of the Student Body (GSB), the Graduate Professional Student Senate (GPSS), private carriers serving Ames, and the local community through public and stakeholder input meetings. The preferred Intermodal Facility site was selected in part based on its central location in the community and its proximity to two important economic generators – Iowa State University and the Campustown commercial/retail area. This site is located adjacent to existing public transit services and provides an opportunity to create a transportation focal point for the community. This site will accommodate a facility of the size and magnitude needed to link the desired transportation functions and provides a unique economic development opportunity within the community.



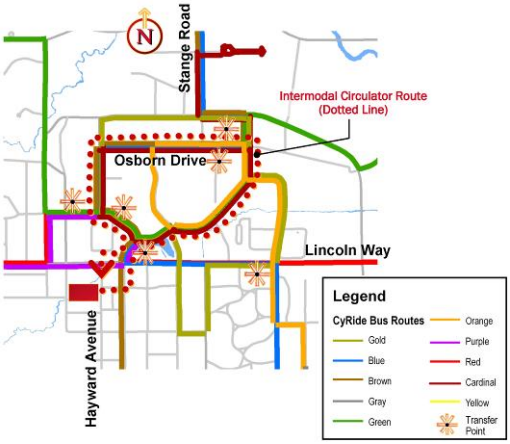
INTERMODAL CENTER – SITE LOCATION

Project Components

The transportation, parking, office and retail functions within the facility are displayed in Concept Floorplan Design and include the following functional elements:

TRANSIT FACILITY COMPONENTS

The transit components of this facility have been developed to provide a seamless, one-stop concept for public and private transportation in the community. Residents and visitors can be transported from locations around the nation and region on private intercity bus carriers into this facility and then be dispersed throughout the community and/or region via CyRide, the fixed route public transportation provider and Heart of Iowa Regional Transit Association (HIRTA), the regional paratransit service serving Story County. One local public transit route would be rerouted through the facility and a shuttle route would be added to the CyRide system. The shuttle route would connect intermodal center passengers with major transfer locations on Iowa State University's campus for access to the



INTERMODAL FACILITY SHUTTLE ROUTE MAP

entire community as well as to the Campustown Business District. The shuttle service cost would be included in the TIGER grant budget for the first two years of operation. As a means of reducing system-wide emissions, the shuttle would operate with two hybrid buses (purchased as part of this project) equipped with Automatic Vehicle Location (AVL) equipment for ease of use by riders. The new shuttle route, which these hybrid buses will operate, is diagramed to the right and would not increase CyRide's spare ratio as both buses requested within this application would operate during the peak hour when ISU is in session offering 10-minute headways during the day. Spare buses in CyRide's existing fleet would be used as spare buses for this new route.

The facility programming for the transit component includes:

- Public Transit Providers -
  - Three transit bays for CyRide.
  - One transit bay for HIRTA.
  - Two 40-foot hybrid-electric buses to be operated by CyRide from the facility.
  - Automatic Vehicle Location (AVL) system - The concept as proposed would include:
    - Core bus AVL system: The core system is made up of the software used by dispatchers for operations management that periodically receives real-time updates on fleet vehicle locations. Required for communications and analysis are an onboard computer with an integrated Global Positioning System (GPS) receiver and mobile data communications capability.
    - Management and passenger information features: These would include schedule adherence monitoring, onboard mobile data terminals, managed voice communications, text messaging, next stop announcements, and automatic passenger counting and real-time passenger information using dynamic message signs at the Intermodal Facility and/or other selected stops.
- Private Carriers –
  - Intercity Bus Carriers - Two Transit Bays for Jefferson and Burlington Trailways (national carriers)
  - Regional Airport Shuttle - One Transit Bay for Executive Express (Ames to Des Moines International Airport carrier)
  - 1,500 square foot office space for intercity carrier/airport shuttle offices/passenger waiting area
  - Long-term parking for 30 intercity/airport shuttle customers

TAXI AND CARPOOL/VANPOOL COMPONENTS

Ames is served by two taxi companies which would also be included within the site by an on-street cutout accommodating up to 2 vehicles at one time.

Iowa State University and other large employers in Ames and in central Iowa support carpool and vanpool programs. The Intermodal Facility would be considered as a common meeting place/destination for participants utilizing these regional programs. There are currently more than 18 organized and highly utilized carpools/vanpools serving more than 180 individuals traveling to/from Ames and the surrounding smaller communities and the Des Moines metro area, located 30 miles to the south. The facility programming for the alternative vehicle components includes:

- Taxi – On-street cut-out accommodating up to two taxi's
- Vanpool - 40 vanpool parking spaces for vans and vanpool participant vehicles commuting from Ames and nearby communities to Des Moines.

BIKE AND PEDESTRIAN CONNECTIONS AND COMPONENTS

The Intermodal Facility is a place where all modes of transportation, including bicycle and pedestrians, will gather, interchange and disperse within the community, region and nation. Through construction of this facility, residents, students and visitors would be able to ride their bike to this facility in Central Ames, park their bike in a safe, weather-protected locker, use the facility's showers/locker room and take CyRide into campus, throughout the community or to a retail shop/office in the Revitalized Campustown Business District. Therefore, it is critical that the facility include staging and customer parking for bicycle and pedestrian services.

Specifically, the facility would serve as a trail head for a bicycle/pedestrian path extending through the facility site, west through the ISU Arboretum connecting to an existing bike path approximately 4 blocks to the west connecting up with a major private student housing area. This aspect of the project adds enhanced livability within the community. To serve this portion of the facility, the following programming criterion is included.

- An 1,800 foot shared-use bike and pedestrian path through the ISU Arboretum.
- An 800 foot shared-use bike/pedestrian path through the proposed Intermodal Facility property.
- Emphasized pedestrian and bicyclist street crossings at Sheldon Avenue and Hayward Avenue.
- 60 Bike Lockers and two locker rooms including showers for bike/pedestrian commuters.
- Shared public restrooms for Campustown and Intermodal Facility patrons.

BIKE PATH CONNECTIONS AS PART OF TIGER GRANT

PARKING FACILITY COMPONENTS

The Ames Intermodal Facility would serve the following four parking purposes:

- Replacement of displaced surface parking on the current site.
- Additional parking for Campustown Business District's Redevelopment.
- Parking for the transit park-n-ride, vanpool/carpool and bicycle/pedestrian users.
- Additional parking for ISU's West Campus – Proposed Biorenewables Lab/Research Facility.

A shared parking, management concept will be utilized that requires balancing the needs (peak and off-Peak) for the four purposes listed above. A unique element of the proposed Intermodal Facility is its ability to support peak parking demand for each for the purposes without building a structure that contains the total demand for each. For the Intermodal Facility, one space will be used by multiple purposes throughout the day/week, thereby reducing the total number of parking spaces.

As a part of the Intermodal Facility preliminary engineering, a strategic assessment of the stakeholder's parking needs and the potential for impacts to the surrounding residential areas was completed. During this assessment, the University, Campustown and transportation parking needs were balanced with the neighborhood need for additional parking due to the number of single-family homes that have been converted into student apartments creating a shortfall of on-street parking. The total need for parking is as follows:

Iowa State University	700 (a portion of the 1,100 parking spaces needed)
Campustown	271 (as identified in the *Campustown Study*)
Transportation	70
Area Residents	50
TOTAL	1,091

The Intermodal Facility created a win-win situation and a much more livable community for all parties as the project is able to accommodate needs from each of these stakeholders. This total demand of 1,091 can be accommodated by 750 parking spaces in a shared parking concept. These 750 spaces are broken down by type of users during peak and off-peak times as shown in the table to the right.

	Space Estimate	
Parking Element	**Weekdays**	**Evenings/ Weekends**
Replace Lot 60	240	240
Campustown Redevelopment	140	275
Shared Parking (ISU/Campustown Businesses/ Residential)	300	205
Des Moines Airport Shuttle	20	20
Intercity Carriers	10	10
Carpool/Vanpool	40	0
	750	**750**

DEVELOPMENT SPACE COMPONENT

The Intermodal Facility would include two types of development with the building footprint. First, Iowa State University's Department of Public Safety (DPS - Campus Police Division and Parking Division) would be relocated from a cramped, shared-educational space on campus to the facility. By including DPS Department, an enhanced level of security and parking/transit coordination unique in Iowa would be achieved. DPS would provide security for the facility as an occupant as well as passenger ticketing services for the intercity carrier operations. DPS would be able to open/close the intercity waiting area 24/7 allowing access at any time, which is a vast improvement over the existing waiting area being open only 8 hours per day, Monday through Friday. This heightened level of safety and coordination is an integral component in making this facility a destination location within the community by enhancing the facility patrons' perception of safety and accessibility that may extend into Campustown as well.

Second, the facility would also accommodate retail opportunities for complementary facility users such as a coffee shop, daycare, or convenience shopping. Being located adjacent to a redeveloping business center would discourage a more substantial retail/office component as the desire would be to spur this redevelopment in adjacent blocks of Campustown.

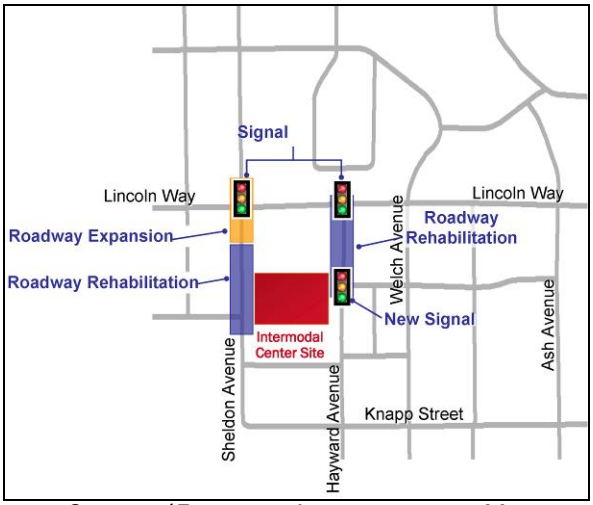
Programming for the development portion of the facility is as follows on the next page.

- Iowa State University's Department of Public Safety - 30,000 square feet of space for university Campus Police and Parking
- Complementary Retail - 5,000 square feet.

ROADWAY INFRASTRUCTURE IMPROVEMENTS

In developing a structure of this size and magnitude, enhancements to the street network adjacent to the facility are needed to adequately address additional traffic generated by the facility, as well as changes in access points for parcels. The following modifications to the street system are proposed as part of the Intermodal Facility:

- Reconstruct Hayward Avenue from Chamberlain Street north to Lincoln Way - this would provide an extended left and right turn lane at the T-intersection with Lincoln Way. Presently, Hayward Avenue is constructed to a width of approximately 30 to 38 feet wide and can accommodate the required lanes without widening the street section, but removing some on-street parking is required. The parking that would need to be removed could be relocated to the proposed parking structure. The northbound section on Hayward Avenue would be similar to the current configuration with the primary difference being a longer left turn bay. The northbound and southbound approaches at Chamberlain Street would be modified to include left turn lanes and shared through/right turn lanes.
- Reconstruct Sheldon Avenue from Arbor Street north to Lincoln Way – this would include reassignment of the shared northbound through/left turn lane to be a northbound left turn only lane, with the current northbound right turn lane being reconfigured as a shared northbound through/right turn lane. While no additional right-of-way is likely to be required, the concept will require expanding the current section from approximately 150 feet south of Lincoln Way to Arbor Street.
- Replace the current signals at Lincoln Way/Hayward Avenue and Lincoln Way/Sheldon Avenue and add a new signal at Hayward Avenue/Chamberlain Street to control traffic in/out of the Intermodal Facility.



SIGNALS/ROADWAY IMPROVEMENTS MAP

FACILITY SUSTAINABILITY FEATURES

A critical component of the Intermodal Facility would be its design to Leadership in Energy Efficiency in Design (LEED) standards. By its very function as a transit facility, the Ames Intermodal Facility will play a role in reducing the region's greenhouse gas emissions and reducing dependence on oil. Moreover, the facility's integrated design team will tackle energy and environmental issues and challenges in a collaborative manner with sustainability and energy efficiency goals in the final engineering of the building. Building design and subsequent energy performance during occupation provide a nexus between long term outcomes and immediate returns, demonstrating that the benefits of designing a building with careful attention to life cycle costs provide immediate and ongoing benefits. Benefits that will be achieved in this facility include:

- Optimum energy efficiency: Building envelope and building systems such as lighting, HVAC, energy recovery systems, and building design innovations are constructed to achieve optimum energy use; a building control system monitors and provides data to ensure that the building's energy systems are properly functioning; and light sensors adjust electric lighting levels for efficiency and safety.
- Superior indoor environment and resource efficiency: Water efficiency from low flow facilities; user controlled thermostats for thermal comfort; CO2 sensors for safety and increased ventilation; large window areas allow in day light and provide exterior views; and no building materials emit gases that are hazardous to human health.
- Efficient and sustainable construction practices: Wherever possible, materials are extracted and manufactured within 500 miles of the site; where possible, products have recycled or bio-based content; flooring, ceiling materials, structural steel, and concrete have high recycled content.
- Low impact on the environment: Refrigeration equipment uses refrigerants that do not deplete the ozone layer; landscaping consists of native plant materials which require limited or no irrigation; where irrigation is necessary, captured rain water is used.

The LEED checklist was reviewed preliminarily for the Intermodal Facility. The summary below shows "probable" and "possible" points for each environmental category based on the preliminary engineering of this facility. This analysis showed 60 "probable" points achievable for LEED Gold certification, with another 10 "possible" points placing the facility solidly in the Gold level of 60-79 points.

LEED Rating Criteria	Total LEED Points Available	Probable	Possible Additions
Sustainable Sites	26	11	0
Water Efficiency	10	8	0
Energy and Atmosphere	35	21	4
Materials and Resources	14	4	2
Indoor Air Quality	15	12	0
Total Core LEED Points	100	56	6
Innovation in Design Credits	6	4	2
Regional Priority	4	0	2
Grand Total LEED Points	110	60	10

Facility Business Plan

The three partners have developed a Business Plan that addresses the ownership, continuing control and legal requirements of a DOT grant-funded project. Agreement among the parties on issues such as, management, budgets, revenues and expenses are included in this document. A FTA Joint Development Agreement is currently being developed from this Business Plan and will be completed prior to February 2010.

A critical component of this document is the ownership of the facility. If selected for funding under TIGER, the following general management policies/decisions have been made:

- Facility Ownership: The grantee, CyRide.
- Facility Management/Operations: The grantee, CyRide under an agreement with its project partner, Iowa State University, due to their extensive parking experience in the Ames community and the parking division being located within the facility.

- Land Ownership: The land would be owned by Iowa State University and a long term lease agreement (approximately 50 years, the estimated life of the facility) would be established between the University and CyRide. Similar lease agreements between the city and the University are in place and active for the Ames-ISU Ice Arena, Ames Aquatic Facility and CyRide.

As part of the Business Plan, a revenue/expense analysis was completed to determine if revenues generated by the facility through parking rates/retail and intercity carrier office leases would be sufficient to sustain the long-term operating and maintenance costs associated with the Intermodal Facility over the next 20 years. This analysis is included in the Selection Criteria section under State of Good Repair.

Project Schedule

CyRide will expedite final engineering and construction of the Intermodal Facility to the greatest extent possible even prior to grant announcements in February 2010 by completing the following required project pieces:

- Documented CE – This document is completed and submitted to the Federal Transit Administration with anticipated approval by January 2010.
- Joint Development Agreement/Cost Allocation Plan – Completion by January 2010.
- Architectural Services and Professional Services Contracts – Procurements completed by February 1, 2010 contingent upon grant approval.

If approved for TIGER funding, the following schedule will be followed beginning February 18, 2010 through substantial completion by January 2012.

Intermodal Facility Task	Date Initiated/Completed
Joint Development/Cost Allocation Plan	Sept. 2009/Jan. 2010
Design Professional/Construction Mgr. Selection*	Sept. 2009/Jan. 2010
Documented CE	Sept. 2009/Jan. 2010
Final Engineering	Feb 2010/April 15, 2010
AVL Bid Specifications	Feb. 2010/Aug. 2010
Sheldon/Hayward Signal Upgrade at Lincolnway	Mar. 2010/Apr. 2010
Purchase Hybrid Buses under Existing Options	Apr. 2010
Construction Document Preparation	April 2010/June 2010
Bid Process/Contract Award	June 2010/July 2010
Construction (17 months)	Aug. 2010/Jan. 2012
AVL Bid Process/Contract Award	Sept. 2010/Oct. 2010
AVL Deployment	Nov. 2010/Mar. 2011
AVL Testing	Apr. 2011/Sept. 2011
Sheldon/Hayward Roadway Improvements	May 2011/Nov. 2011
Signal Installation Hayward/Chamberlain	June 2011/July 2011
Hybrid Buses Delivered (18 months)	Oct. 2011
Occupancy/AVL Go Live/Shuttle Route Implemented	Jan. 2012

* Contingent Upon Award of a TIGER Grant

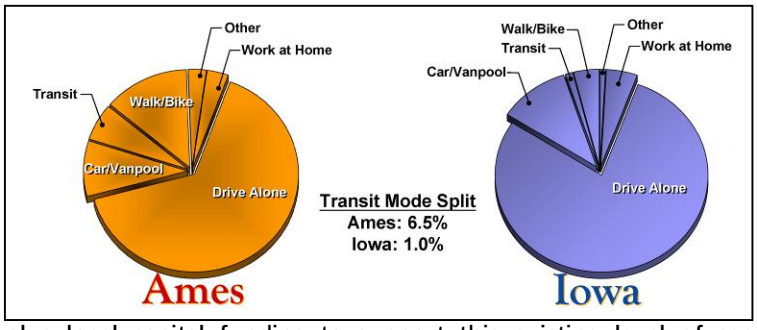
CyRide will enter into a construction management contract with Iowa State University to provide technical construction oversight to ensure a timely completed project. The University's Facilities Planning and Management Department has a successful track record of completing projects as scheduled.

Intermodal Facility Purpose and Urban Challenges Addressed

The Ames community's initial challenges addressed only the transportation and economic needs of the community. Since that time, the community has taken a much broader approach and developed a process in which the following conditions and needs were examined: 1) transportation/mobility 2) land use, and 3) social/economic.

From this more comprehensive examination, the three partners identified a range of challenges that could and should be addressed in the community with a goal of increasing livability within the community. The results of this assessment are documented below.

- Transit Intensive Small Community – In the past fiscal year, CyRide carried more than five million passengers in a community of just over 52,000 in population. This calculates to a per capita annual ridership of approximately 96 trips per person rivaling large metropolitan areas like Chicago and Denver. The "Mode of Travel to Work" graph documents the per capital ridership of other communities in Iowa and the Midwest as compared to Ames. With this transit intensive environment, comes real challenges for a small community and tax base. The local community contributes more than 70% of the operating funds plus local capital funding to support this existing level of service. However, with this transit intensive focus and limited funding, the community has been forced to spend its available resources on its internal, public transit system which has led to a lack of connectivity with regional and national transit carriers. The existing intercity depot is located in the industrial area of Ames nearly 2 miles from other transit connections and operated by the local school bus operator. Intercity patrons arriving in Ames after the school bus operators work hours, must wait for or be dropped off outdoors in often times extremely cold and hot weather with no access to public transportation or even a telephone. Due to this remote, unsecured area, there are safety concerns. This disconnect has left its residents, students, faculty and visitors literally stranded without options, which has led to a less livable city. The challenge is to develop a site/facility that will connect these public/private transportation modes and enhance safety for intercity carrier patrons.



CURRENT CIT BUSINESS/BUS DEPOT (OUTDOORS) AFTER OFFICE HOURS

- Revitalization of the Campustown Area – The Campustown commercial district exemplifies the epicenter of the "town and gown" blending of Iowa State University and Ames. Both the University and Ames understand that the vitality and image of the Campustown district reflects on each of them (positively and/or negatively) and they each have a responsibility in ensuring that they do their part in supporting the area's sustainability. The desire for a vibrant Campustown is shared as evidenced by the City Council's #1 goal to rejuvenate Campustown and Iowa State University's funding of a Campustown Redevelopment Study.

CAMPUSTOWN PARKING – TYPICAL CONDITION

DETERIORATED CONDITION OF CAMPUSTOWN RETAIL SPACES

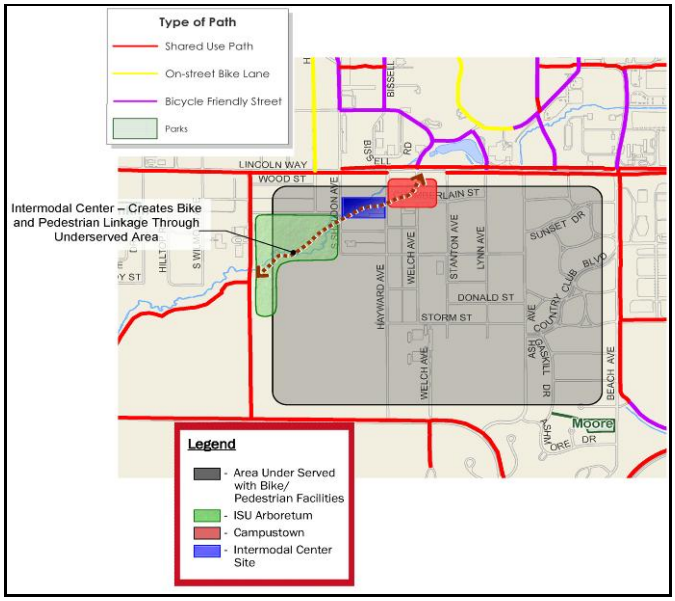
ONE OF MANY VACANT CAMPUSTOWN RETAIL STORES

This study was prompted by current student government leadership and University's belief that its current condition reflects poorly on the University and the ability to attract students and researchers, the life's blood of a sustainable university. The existing condition of this important Ames business district has been in a downward economic and physical condition for the past 40 years. The outward condition of buildings, streets, sidewalks and other infrastructure elements has significantly deteriorated as evidenced by the photos. This physical deterioration has led to its economic downturn as well. Many vacant storefronts are evidenced and the remaining store owners have asked both the University and City for assistance. This desire for redevelopment is evidenced in the Petition supported by Campustown businesses. The *Campustown Study* identified a need for 271 off-site parking spaces to support the redevelopment effort. Through discussions with developers, this parking component could provide the catalyst to jumpstart the redevelopment. Without this parking, the economic viability of the redevelopment is not possible. The challenge is for a small Iowa community of 52,000 to financially support the redevelopment effort ***and*** the cost to develop a parking/transportation facility that will propel the redevelopment forward.

- Advancement of the Iowa State University Master Plan – The presently adopted Campus Master Plan calls for continued growth in the research and education activities and capabilities on Iowa State University's campus. Additionally, the Campus Master Plan desires to enhance the pedestrian/pastoral nature of the state's only land-grant education and research institution. While the Campus Master Plan emphasizes these two elements, the reality is that the areas where education and research activity expansion would most logically occur results in displacing vehicle parking in strategic areas of the main campus area.

  The University has identified a parking space shortage of over 1,100 spaces when looking at current needs and short-term (next five years) building expansions. The challenge is to identify fringe-area parking alternatives for this parking shortage that will allow the University to continue to grow and meet national education and research initiatives.

- Missing Linkages in the Bicycle and Pedestrian Systems - Ames is a community that has emphasized use of alternative modes of travel, motorized and non-motorized, in providing mobility to the broader community. While an extensive bike/pedestrian trail system exists today, there remain a number of disconnects in the overall system. One of the missing linkages is in the area between the city's Southwest Growth Area and the University. This section of Ames has seen explosive development and growth over the past 5-7 years. The current trail system along College Creek in the southwest part of the city ends at State Avenue leaving a 4 block gap between the University and the southwest side of Ames. The challenge is to provide a connection along College Creek from an existing shared-use path to the University connecting West Ames with the employment focal point in the community – the University.



DISCONNECTED BIKE PATH

- Iowa State University Department of Public Safety Space Needs – The University's Office of Public Safety, which is made up of a Police Division and a Parking Division, is presently located in the Armory in the southeast quadrant of Osborn Drive/Bissell Road. While the general location of the building provides convenient access to the heart of the education activities of the University:
  - The current facilities no longer provide adequate space for a 30-officer police force and parking services.
  - The current facilities do not provide for a reasonable, and safe, separation of the range of functions carried out by the two divisions. For example, persons being processed for criminal activity on campus and

customers seeking parking information or addressing a parking need/violation are co-mingled. Current safety and security industry policies prefer a much greater level of separation/isolation between administrative activities (parking) and criminal activity processing. The limited space allocated to both divisions in the Armory building does not allow for any greater separation.

- The heart of the education activities along Osborn Road may represent the area of greatest student/faculty/staff concentrations, however, the service area for parking service and campus police extend well beyond the Osborn Road corridor. The service area for DPS extends more than 10 miles in all directions. This site geographically centralizes their offices and services within Ames. The challenge is to relocate the DPS functions (parking and campus police) to an adequately sized facility today and for the future, on the fringe of Iowa State University's main campus.

- Better Rideshare/Vanpool Facilities - A significant number of vanpools are served in the Ames community (18 with approximately 180 participants) and the vanpools gather in a dozen retail or hotel parking lots throughout the city. Additionally, hundred of informal carpools have been formed commuting to nearby communities such as Boone, Nevada, Des Moines and Story City. As of the 2000 census, approximately 18.5 percent of Story County residents work outside the county, most traveling to and from the Des Moines metropolitan area 30 miles south of Ames. The challenge is to identify a facility/location that can provide an efficient means of collecting and distributing long distance commuters in the community.

TIGER GRANT SOLUTION: COMBINE THE NEEDS FOR A COORDINATED TRANSPORTATION SYSTEM WITHIN A SINGLE FACILITY, WITH THE PARKING NEEDS FOR THE ADJACENT REDEVELOPMENT PROJECT AND BENEFIT FROM THE ECONOMIES OF SCALE FOR THE TWO PURPOSES WHILE AT THE SAME TIME, PROVIDE A REDEVELOPMENT TOOL FOR THE CAMPUSTOWN AREA. THIS EFFICIENT, MORE INTENSIVE AND ENVIRONMENTALLY-FRIENDLY LAND USE WOULD SUPPORT THE CREATION OF 505 NEW, LONG-TERM JOBS (DOCUMENTED IN THE ECONOMIC COMPETETIVENESS SECTION OF THIS APPLICATION) AND MAKE AMES A MORE LIVABLE COMMUNITY.

PROJECT PARTIES

The Ames Intermodal Facility is a joint development among the City of Ames, Iowa State University and the Ames Transit Agency (CyRide). A brief description of each entity and their roles and responsibilities under this TIGER project are as follows:

- CyRide – As an agency of the city, CyRide is the designated public transit system for the Ames, Iowa community. The agency has been in operation for 33 years serving both the City of Ames and Iowa State University. Through a unique, three-party agreement among the City of Ames, Iowa State University and the Government of the Study Body representing ISU students, a progressive transportation system with a service level and frequency rivaling much larger communities has been developed operating 18 hours per day with 2-40 minute frequencies providing more than 96 trips per capita and more than 5 million annual rides in a community of 52,000, providing more rides by s single transit system in a metropolitan area than any other city in Iowa, including the capital city of Des Moines.

  CyRide would own and have federal grant oversight over the Intermodal Facility project and has the technical capacity to administer a TIGER grant. The transit system has received several Department of Transportation Congestion Mitigation Air Quality grants administered through the Iowa DOT and is familiar with documentation and monitoring requirements for transportation programs. It is also currently administering over $3.2 million in ARRA grants. Additionally, CyRide administers a $10-20 million dollar operating and capital budget annually with a Gold LEED certified office facility. The Transit Director, who would have overall responsibility for this grant, has been in the transit management field for 25 years with responsibility in the grant administration area, administering an Intermodal grant in excess of $18 million dollars at a larger transit system.

- City of Ames – Ames is a community of approximately 52,000 residents located in Central Iowa. The city's role in this project will be to support the economic development and transportation functions of the facility and

to work with the community if the facility is chosen for funding. With its commitment to sustainability and making Ames a livable community, it has set itself apart from similar-sized communities. Ames' most recent awards highlighting transportation in Ames include Mother Earth News, the world's leading magazine dedicated to sustainable living, featuring Ames as one of nine "Great Places You've Never Hear Of" list and Money Magazine's - "Top 100 Livable Cities In The Nation"; the only Iowa community to make the list.

- Iowa State University - Iowa State University is a land-grant university with a student enrollment of approximately 27,500 and faculty/staff of 6,000. It is one of the world's leading educational institutions and plays a major economic role in the Ames community and Central Iowa region. Its employment, education and research opportunities create an economic draw/connection to the population center of the Des Moines metropolitan area, located 30 miles south of Ames, with a population exceeding 500,000. Iowa State University would provide construction management services for the Intermodal construction project and CyRide would enter into an operating management contract for daily oversight of the facility. The University has extensive, successful experience in both these areas as well as with six LEED Buildings.

The three partners have a shared goal to make Ames a livable community. This partnership includes numerous joint ventures that have developed over time and are documented in the Past Cooperative Partnerships link. Two examples include the CyRide administrative offices and maintenance facility and the Ames/ISU Ice Arena. CyRide is located on ISU land, however, the city/CyRide own its facility (funded with the FTA Section 5309 program) and the two entities share in the operation of its service. A second shared facility is the Ames/ISU Ice Arena where ISU owns the land and the city owns and operates the facility with each sharing use of the facility. The Intermodal Facility is just one more example of the livable community goal where the joint, established partnership among the three entities could further enhance community connections.

GRANT FUNDS AND SOURCES AND USES OF PROJECT FUNDS

CyRide has developed the following project budget for the Intermodal Facility with a 90% federal TIGER grant request and 10% match provided by a variety of local and state funding sources. The budget was developed through a consortium of construction experts provided by the consulting firm, URS, and architects and engineers from the City of Ames and Iowa State University and reflect actual costs plus contingency and administrative costs. The site acquisition value was based on the market value as determine by the Ames City Assessor evaluation.

TOTAL PROJECT BUDGET/USES

Project Element	Unit of Measure	Unit Cost	Units	Cost
Site Acquisition	SF			$2,227,500
Site Preparation	SF	5% of Const.		$1,732,000
Parking Structure (750 spaces)	Space	$19,500	750	$20,183,000
Dept. of Public Safety	SF	$225	30,000	$9,315,000
Retail Space (shell)	SF	$150	5,000	$1,035,000
Intercity Office/Waiting Area		$150	1,500	$311,000
Bus Circulation (Road)	SF	$50	35,000	$2,415,000
Bus Circulation (Bridge)	SF	$125	5,000	$863,000
Bike Lockers/Amenities	SF	$150	1,000	$207,000
Bike/Pedestrian Path	Lineal Foot	$75	1,000	$104,000
Public Restrooms	SF	$150	1,000	$207,000
Roadway Improvements				
- Signals	Each	$175,000	3	$725,000
- Street Improvements	Lineal Foot	$900	1,000	$1,242,000
Rolling Stock (2 Hybrid Buses)	Each	$600,000	2	$1,200,000
Shuttle Operations (Initial 2 Yrs.)	Annual Cost	$200,000	2	$400,000
CyRide AVL/NextStop				$1,500,000
TOTAL				$43,666,500

LOCAL MATCH SOURCES

Non-Federal Matching Funds	Dollars	Percent
State Transit Infrastructure Grant (Pending Jan. 2010 Ia. DOT Approval)*	$880,000	
Land Value (Iowa State University)	$2,227,500	
Iowa State University Capital Budget	$571,818	
CyRide Capital Budget	$204,000	
City of Ames Capital Budget	$483,332	
TOTAL Non-Federal Match	$4,366,650	10%
Budget Sources		
Non-Federal Match	$4,366,650	10%
Federal TIGER Request	$39,299,850	90%

* See Iowa Department of Transportation Letter of Support

The State Transit Infrastructure Grant funding for $880,000 of non-federal match will be submitted to the Iowa Department of Transportation (Iowa DOT) by the state grant deadline of October 1, 2009 with approvals in January 2010. Preliminary discussions with the Iowa DOT, who has responsibility for allocation of these funds, are that they are excited about the project and have indicated that they believe it will rate well in the grant evaluation process. However, if this funding is not approved for state funding, the City of Ames and Iowa State University have committed to providing $880,000 in additional local match to support the Intermodal Facility TIGER grant.

INTERMODAL FACILITY - RELATIVE TO PRIMARY SELECTION CRITERIA

Consistent with the grant application review and selection criteria, the local partners have assessed the Intermodal Facility in Campustown relative to the long-term return on the investment and the level of job creation that can be associated with the proposal. Additionally, the local partners have developed supporting material highlighting the "ready to go" status of the city, CyRide and the University on construction and operation of not just the Intermodal Facility, but also the rejuvenation/redevelopment of Campustown. The following sections provide documentation of the:

- Key analysis input assumptions.
- Results of the range of analyses.
- Conclusions relative to the selection criteria.

ANTICIPATED LONG-TERM OUTCOMES

STATE OF GOOD REPAIR

The proposed Intermodal Facility contributes to the State of Good Repair (SGR) of local transportation infrastructure in two basic ways:

- First, the project improves the efficiency and performance of existing transportation infrastructure. This improvement will contribute to the revitalization of the local area which is now economically marginal and considered distressed as classified within the New Market Tax Credit program.
- Second, the project will be designed, constructed, operated and maintained in accordance with asset management practices optimizing its up front capital investment while minimizing long term maintenance costs.

CURRENT AND FUTURE CONDITIONS OF TRANSPORTATION INFRASTRUCTURE

There are two basic infrastructure components to the project:

- The site of the Intermodal Facility itself.
- The streets, sidewalks and paths connecting the site to the remainder of the area transportation infrastructure.

The project will greatly enhance the efficient performance of local transportation without materially expanding the land consumed by the current facilities.

Intermodal Site

The Intermodal Facility greatly multiplies the efficiency of an existing surface parking lot by increasing its capacity, providing for intermodal connections, and creating a non-motorized link between two important destinations allowing for a "better and higher use" of the land for transportation purposes.

LOT 60 – CURRENT CONDITION

The current site has a single transportation use as a 240 space surface parking lot assigned to ISU students who reside in nearby residence halls. The site currently does not provide any dedicated pedestrian and bicycle facilities linking the ISU Arboretum with the main campus. Finally, the site provides no parking to support local businesses and does not link to other transportation modes.

LOT 60 – PROPOSED

The project will expand the transportation value of the site by providing for eight transportation uses as well as increasing to 750 parking spaces in a site now containing only 240 spaces. The facility will accommodate the current residence hall users as well as serve as a fringe park and ride facility for people going to the campus as well as accessing intercity, HIRTA regional services and airport transportation services. Further, the project entails the construction of pedestrian and bicycle pathways linking the main campus with the Arboretum. The Intermodal Facility itself will have locker rooms available for bike storage and bike rider use.

Street Access

The streets accessing the facility include Lincoln Way, Hayward Avenue and Sheldon Avenue. These streets are operating at a level-of-service of C and D. After minor improvements associated with the project, level-of-service is not expected to change because the increment of traffic added to any one of the adjacent intersections is minor relative to the current and proposed cross sections. Rather, the streets and signals adjacent to the Intermodal Facility will be upgraded with state-of-the-art signals at Hayward and Sheldon replacing signals that are past their useful life operating on outdated technology and that cannot adequately address progression needs in the corridor. The addition of a new signal at Hayward and Chamberlain further improves traffic flow through the neighborhood.

Included with the project concept is rehabilitation and upgrading of Hayward Avenue from Chamberlain Street to Lincoln Way without widening its cross section. Parking would be removed from one side directly adjacent to the Lincoln Way intersection allowing for the northbound left turn and right turn bays to be extended. The cross section of Sheldon Avenue at Lincoln Way would be extended to the south an additional 400 feet and the south approach left/through and right turn lane assignments would be reconfigured as a left turn and through/right turn lane to better accommodate left turn traffic. The improvements to Sheldon Avenue can be accomplished within the current right-of-way.

CONSISTENCY WITH LOCAL EFFORTS TO PROMOTE STATE OF GOOD REPAIR

The Intermodal Facility is consistent with the goals and objectives of the Ames Area Long Range Transportation Plan (LRTP) which calls for the preservation of existing infrastructure, a cornerstone of the state of good repair criterion:

> Goal 2— Transportation Performance - Provide efficient transportation service with needed capacity, convenience, health, and safety for all users….
>
> i. Preserve and maintain the existing transportation facilities including pavement, signage, striping, signal systems, and other transportation infrastructure.[1]

The Intermodal Facility addresses this goal by more effectively providing efficient transportation service through the connection of numerous modes of existing transportation in Ames. This existing transportation structure is maintained and improved. Additionally, the Intermodal Facility is a key component of the transit section of the approved LRTP.

The current Ames Area MPO Transportation Improvement Program (TIP) underscores this commitment by placing priority on preservation projects. The project is contained in the TIP and in the State of Iowa's STIP. Minor revisions to the project cost reflected in the TIP and STIP will be completed in September 2010 to coincide with the dollars requested in this TIGER grant application.

As the current condition of a connected transportation system does not exist in Ames, transportation connectivity will improve on a continuum from zero or non-existent to a world-class example of transportation excellence.

CONTRIBUTION TO ECONOMIC REVITALIZATION

The project is expected to contribute to revitalizing a part of Ames that is considered economically marginal and distressed under New Market Tax Credit criteria. Without the project, the revitalization would be postponed, and most likely not initiated at all. Therefore, a no build alternative would garner zero, new long-term jobs in the community over the next 20 years. Consequently, none of the long-term economic benefits ($176-$302 million) would occur if this facility were not built. This statement is supported by the desire to redevelop this area since the mid-1960's without results and the fact that lease rates have not increased in the past 10 years and have actually decreased in some instances. As has been discussed earlier (and will be referred to again later) the rejuvenation of the Campustown area is part of the City of Ames and of ISU's goals. Providing additional parking in the immediate area is a key facet to this rebirth. As will be shown later, the parking and transit elements of the facility will help generate approximately 500 new long-term jobs contributing approximately $22 million in annual labor income and $54 million in new sales.

OPTIMIZING LONG TERM COSTS

The project will use a construction method that balances and optimizes the initial capital outlay and the construction schedule with short and longer term facility maintenance. As construction would not be initiated until after grant selection has been made (approximately February 2010), cold winter weather will influence construction practices with some influencing maintenance needs and costs. Therefore, preparation of a coordination plan is critical to minimizing life-cycle costs.

The project includes a 750-space parking facility to be primarily constructed of concrete. Two basic approaches exist for the facility's construction. The first method is "cast in place" (CIP) concrete and the second method is "pre-cast" concrete. From an on-going maintenance point of view, CIP structure requires less effort than the pre-cast building, however, the initial capital cost for CIP is approximately 10 to 20 percent higher than pre-cast. Ongoing maintenance generally consists of power cleaning the structure, replacing lights, maintaining elevators, snow removal, and a myriad of other activities. In addition, sealing of floor/deck joints is a crucial activity that directly impacts the longevity of the structure. While ongoing maintenance activities are similar in both pre-cast and CIP buildings, the sealing activity occurs more frequently in the pre-cast structure. The long term trade-off between the two construction approaches is between the life time cost of joint sealing for the pre-cast structure and the initial higher construction cost for CIP.

[1] Pages 2-1 and 2-2 of *2030 Ames Area MPO Long Range Transportation Plan*.

A schedule showing construction being initiated in August 2010 will result in at least some elements of the project being pre-cast in order to maintain an appropriate construction schedule as prescribed in the TIGER grant program guidelines (substantial completion by Feb. 2012). It is estimated that a CIP structure would cost an additional $1.7 million to build when compared to a pre-cast structure. Assuming the facility will have an expected useful life of at least 35-years, the life time present value cost of joint sealing for the pre-cast building is about $560,000.[2]

A key factor in maintaining the new facility in a State of Good Repair will be to implement a rigorous *asset management program*. CyRide, who will manage the facility, prepares an investment-specific asset management program for each capital facility/asset that is put into service as is evidenced by its current CyRide Facilities Maintenance Plan. As part of the Final engineering, a project-specific long-term maintenance and management plan will be prepared for the Intermodal Facility. The plan will layout the weekly, monthly, semi-annual and other periodic term maintenance needs that will establish maintenance standards as well as a maintenance routine keeping the facility at or near its optimal performance level.

Additionally, the access roads to the facility will be similarly included in the City of Ames ongoing maintenance program. Lastly, CyRide will incorporate the hybrid vehicles into its current Vehicle Maintenance Plan and; therefore, adequately maintain these assets per federal requirements.

SUSTAINABLE REVENUE SOURCE

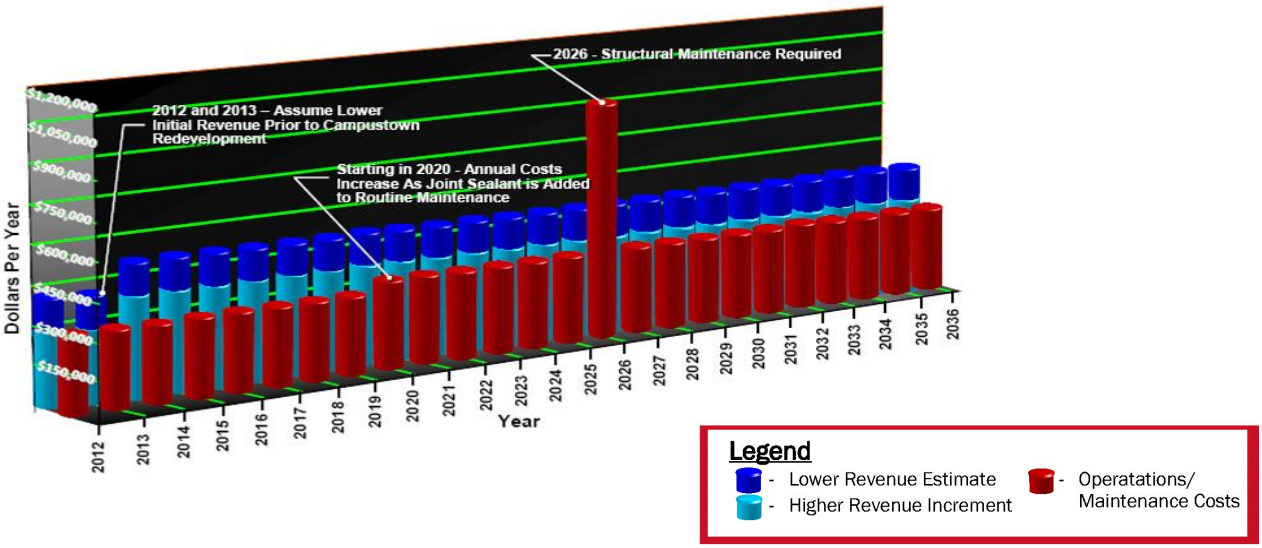
The project's operations and maintenance costs will be financed through parking fees, permits and retail/intercity carrier leases. The operational costs include a shuttle service connecting the facility with ISU's main campus and Campustown at a year 1 cost of $200,000. Other operating and capital costs are based on the following costs:

Cost Item	Annual Cost/ Space	Annualized Tot. Cost
Employee Salary / Benefits /Security	$15.00	$11,250.00
Liability Insurance	$0.00	$0.00
Utilities and Telephone	$55.00	$41,250.00
Elevator Maintenance	$20.00	$15,000.00
Equipment Maintenance	$10.00	$7,500.00
Housekeeping & General Maintenance	$15.00	$11,250.00
Parking Supplies	$10.00	$7,500.00
Legal & Accounting	$0.00	$0.00
Loss & Damage	$0.00	$0.00
Maintenance Supplies	$10.00	$7,500.00
Snow Removal	$10.00	$7,500.00
Miscellaneous	$5.00	$37,500.00
Structural Repair Fund	$50.00	$0.00
Admin. Overhead Est. Annual O/M Costs	$0.00	$0.00
Parking Facility O/M Costs/Yr/Space	$200.00	
	$150,00.00	Annual Facility O/M Costs
	$200,000.00	Shuttle Route Costs (30,666 miles * $1.89/mile) + 4,554 hours * $29.38/hour)
	$350,000.00	TOTAL ANNUAL COSTS

[2] The present value is calculated for 2010 when the design of project would be underway. Joint sealing would be an annual activity beginning seven years following the completion of the structure. The structure would be completed in 2012 thus initial sealing would start in 2019. The structure is anticipated to have a useful life of at least 35 years. A real discount factor of 2.7 percent is used and is derived from Appendix C (December 2008) of OMB Circular A-94.

The table below graphically illustrates the estimated revenue compared to expenditures.

PROJECT'S FORECASTED OPERATING AND MAINTENANCE COSTS



ECONOMIC COMPETETIVENESS

Assessment of the economic benefits and costs associated with the proposed Intermodal Facility have been divided into the short-term construction period and, as emphasized in the TIGER Grant Selection Criteria, the long-term operating period. For each of the periods, the benefits have been quantified as the increment of employment associated with the action, the annual income associated with the increment of employment and the regional impact on sales. This analysis is based upon the work of two prominent, Central Iowa Economists utilizing the IMPLAN Economic Model for Story County (Preliminary Assessment of the Economic Impact of the Proposed Ames Intermodal Facility – An Analysis of the Campustown Site). For purposes of this grant, direct and indirect economic benefits are defined as follows:

- Direct – Job creation, labor income and total sales directly paid from the TIGER grant or as a result of new/redeveloped buildings in Campustown employing new workers as a result of the availability of parking for these businesses.
- Indirect – Job creation, labor income and total sales that result from construction workers or new workers in the redeveloped Campustown area spending money within the Central Iowa region for groceries, restaurants, durable goods, etc. This definition also includes suppliers and services utilized by the construction and new businesses in the Campustown Business District.

SHORT TERM BENEFITS

Employment will be generated in the near term as a result of the use of approximately $40 million in federal funds to construct an Intermodal Facility in Campustown. Construction of the facility will generate 345 construction jobs along with 160 indirect, secondary jobs.

The aggregate impacts of the construction are estimated to be $55.4 million of total output with $20.4 million of new income generating 505 total jobs. The table on the next page displays the breakdown of short term job creation by sector.

The Short Term Economic Impact table on the next page displays the results of applying the construction project cash outlay model and the resulting new jobs created by quarter through the construction period. It is anticipated that

over the first quarter of the project approximately 15 additional construction jobs would be created and that by the second quarter of 2011, the maximum new job total of 116 would be reached. As the project construction winds up by the fourth quarter of 2011, the individual project would still be responsible for creation of 65 new jobs in the Ames region.

Short Term Economic Impact of Campustown Construction, Ames, Iowa

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

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 Intermodal Facility. The 2008 *Campustown Study* projects that the existence of adequate parking and the increased foot traffic associated with a transportation facility adjacent to Campustown will spur the additional construction of approximately 75,800 square feet of office space for future businesses to occupy. It is anticipated that much of the office space would be occupied by businesses with operations complementary to activities of the University. The *Campustown Study* envisions replacing the existing retail space with upgraded, higher quality, retail space surrounding an attractive plaza with walkways and water features. Iowa State University has indicated an interest in developing/leasing office space within the Redeveloped Campustown Business District to support new, year-round employment in an area currently frequented only when school is in session. This will improve the economic vitality of the retail component in the area.

Projections based on the *Campustown Study* suggest that a fully occupied office and retail complex will add a permanent net increase of 300 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, which is typical for Central Iowa, ($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 185 indirect jobs. These direct and indirect increases represent a one percent increase 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 Iowa State University's campus will be a tremendous boost for college students seeking employment of this type to support their college education. Through a University survey, it was found that 53 percent of students work part-time in support of their studies. While these jobs will not be high-paying, the flexible hours and opportunities for shorter work days (associated with part time work) will help lead to their ability to attend Iowa State University and for higher-paying careers as these students graduate and enter full-time employment.

The following table identifies new long-term employment by quarter through 2017 through construction and redevelopment of campustown as a result of this intermodal facility.

CONSTRUCTION PERIOD (LONG TERM) NEW EMPLOYMENT BY QUARTER (2010 TO 2030)

Year	Quarter	New Employment		
		Direct	Indirect	TOTAL
2012	1	15	0	15
	2	18	3	21
	3	21	6	27
	4	24	10	34
2013	1	28	15	43
	2	33	20	53
	3	38	25	63
	4	43	29	72
2014	1	46	38	84
	2	54	47	101
	3	62	56	118
	4	70	63	133
2015	1	76	71	147
	2	95	79	174
	3	114	87	201
	4	134	95	229
2016	1	176	103	279
	2	218	137	355
	3	260	171	431
	4	300	205	505
2017 and Beyond Quarterly Employment		300	205	505

The breakdown of long-term job creation by sector associated with indirect expansion and improvements in property in the vicinity of the Intermodal Facility is shown in the table below.

LONG TERM ECONOMIC IMPACT OF 300-EMPLOYEE CAMPUSTOWN REDEVELOPMENT ASSOCIATED WITH THE INTERMODAL FACILITY

Sectors	Total Sales	Labor Income	Value-Added	New Jobs
Agriculture	$52,114	$4,740	$21,519	0.4
Transportation and Utilities	$611,793	$191,086	$817,293	3.6
Construction	$526,136	$223,958	$262,457	5.3
Manufacturing	$848,797	$201,166	$249,518	4.0
Wholesale and Retail Trade	$2,204,098	$865,839	$1,375,553	34.3
Business Services	$23,481,524	$10,863,305	$11,886,904	249.2
Finance, Insurance and Real Estate	$22,482,299	$8,054,842	$10,153,115	135.9
Other Services	$3,308,298	$1,086,088	$1,508,222	69.5
Government	$575,767	$268,200	$321,490	3.7
Total	$54,090,827	$21,759,225	$26,596,069	505.9
Source: IMPLAN Model for Story County, Iowa				

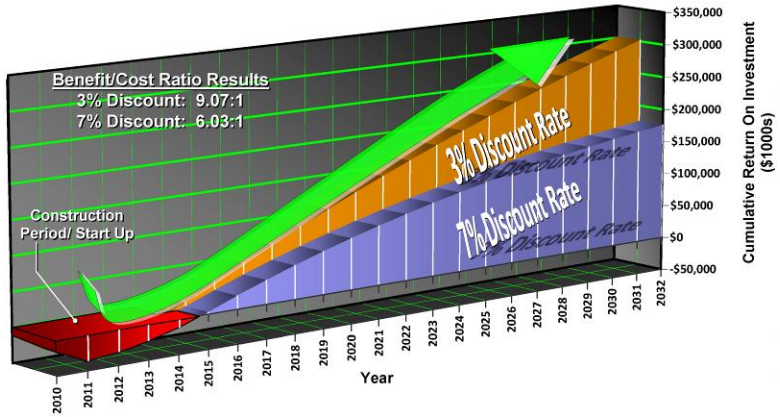
EVALUATION OF EXPECTED PROJECT COSTS AND BENEFITS

The positive information presented for the short-term and long-term period has been converted into an estimate of the return on investment or benefit cost analysis. As directed in the TIGER supplemental information, the return on investment analyses assumed discount rates reflective of:

- An assumed average expected return on private capital: 7 percent per year.
- An estimate of the social rate of time preference: 3 percent per year.

Projecting the value-added of the 505 newly created jobs, which add approximately $25.1 million per year into the local and regional economy at the grant-specified discount rates results in a rate of return on the $39,299,850 federal funding investment of approximately $176 million to $302 million over a 20 year period at the three percent and seven percent discount rates, respectively. The benefit cost analysis results over a 20-year period are displayed in the figure below at a 6.03 or 9.07 to 1 net benefit.

ESTIMATED BENEFITS ON TIGER INVESTMENT



Source: Iowa State University TIGER Grant Economic Analysis

INDUCED LONG TERM ECONOMIC IMPACTS

This section of the grant discusses long term direct and indirect economic impacts of the proposed Intermodal Facility.

BIORENEWABLE COMPLEX AND CAMPUS DEVELOPMENT

As one of the goals of the Intermodal Facility to 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 use is the proposed Biorenewable Complex which will house a Biorenewable Research Laboratory (BRL) as well as space to consolidate the University's Agricultural and Biosystems Engineering (ABE) department.

The total building complex will contain about 124,000 net square feet and includes administrative, faculty and graduate student offices, research laboratories and the necessary shared experimental support spaces, common teaching labs, 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 a logical case can be made 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.

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 Intermodal Facility 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 Intermodal Facility has an added objective of creating a link among Iowa State University, Campustown, The Arboretum, and the existing bike/walking path along College Creek. The Arboretum is a European-style public green space for the public and cross country track for ISU's athletic programs that is otherwise underutilized because there is no link with the ISU campus. In renovating Campustown and building the Intermodal Facility, plans call for extending the existing bike/walking path through the Arboretum, along 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. The College Creek Restoration Study currently being examined by the City of Ames and Iowa State University would support the development of the Intermodal Facility through enhanced livability.

3) Vanpool systems and inter-metro commuting: Census figures estimate that almost 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 Intermodal Facility 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 Intermodal Facility 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 are excited about the possibility of the Intermodal Facility and 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 previous tables are condensed and summarized in the table below. Considering long-term direct and indirect 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.

SUMMARY OF ECONOMIC BENEFITS

Factor	Total Sales	Labor Income	Jobs
Short Term Benefits			
Direct/Indirect Short Term (Construction)	$55,371,493	$20,427,517	505.1
Long Term 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 Benefits: IMPLAN Model for Story County, Iowa

LIVABILITY

The Intermodal Facility will significantly improve the quality of life and livability in Ames, Iowa by enhancing user mobility, accessibility for economically disadvantaged persons, senior citizens and persons with disabilities and through an exhaustive community-wide input effort (see "Partnerships" section in Secondary Grant Selection Criteria). Specifically, these improvements are made through the facility:

- Coordinated transportation system that will link not only motorized but non-motorized transportation modes allowing for easy connections. Additionally, the visibility of this facility within the community will assist residents and visitors in knowing where and how to access all transportation services in Ames. This is particularly important to low income and disabled passengers who will be accessing the facility via HIRTA and the private, intercity and regional carriers.
- Linked bicycle/pedestrian paths through Iowa State University's scenic Arboretum through the Intermodal Facility site connecting with the fast growing, west side of Ames and Iowa State University's central campus.
- Ability to act as the catalyst to revitalize a blighted Campustown Business District and bringing new life and services to Ames residents and visitors.
- Planned parking strategies on the fringe of Iowa State University's campus, prioritizing academic and research facility construction within central campus; thereby, supporting its growing science and technology-based educational institution, which is accessed nationally.
- The Intermodal Facility is a result of more than 5 years of community planning through numerous studies – Coordinated Human Service/Transportation Plan, Transportation Improvement Plan, Long Range Transportation Plan, ITS Architecture, 2005 Campus Parking Supply and Demand Feasibility Study, 2005 Intermodal Transportation Center Study, and the 2008 Campustown Study.

Each of these aspects enhances the livability of Ames, but together it creates a unique American community that focuses on walking, bicycling and transit options to as opposed to the automobile.

SUSTAINABILITY

The Intermodal Facility will improve sustainability through four aspects of the project for (detailed calculations for each are provided in the Sustainability Calculations):

- Operation of hybrid buses to/from the facility
- Design of the facility to attain LEED Gold standard
- Connectivity of bicycle/pedestrian connections which will encourage alternate commute patterns
- Reduced vehicle miles travelled with adequate parking at the Intermodal Facility reducing "circling the block" to find an open parking space
- Reduced vehicle miles due to connected transportation modes

Hybrid Buses - CyRide currently operates only diesel buses with a fleet average age of 12.2 years. Some vehicles currently in operation were built in 1973 and emit millions of additional tons of CO_{2e} over its hybrid counterparts. Operating hybrid buses is a reduction of 3,062 gallons on diesel and 29.6 less tons of CO_{2e} emitted annually.

LEED Gold - The Intermodal Facility design standard to LEED Gold is detailed in the "Project Description" section of this grant. Buildings built to LEED-Gold certification standards outperform conventionally-constructed buildings on a variety of metrics. Compared to the national baseline, a LEED-Gold building can be expected to use 44 percent less energy, have a 34 percent reduction in CO2 emissions and cost 13 percent less per gross square foot in maintenance costs. In addition, the site will experience significant improvements in storm water runoff volume and water quality. On average there will be a 30% reduction in the rate of storm water runoff and 90 percent of storm water runoff will be treated to remove 80 percent of the total suspended solids and 40 percent of total phosphorous, compared to conventional development.

Bicycle/Pedestrian Connections – The Intermodal Facility will encourage commuting by bicycle and walking through the shower and bike locker facilities incorporated into the facility. Sixty bike lockers will be included, therefore, taking 60 cars off of Ames road network. This aspect of the facility will reduce 122,400 vehicles miles, 4,450.9 gallons of gallons of gasoline and 41.2 less tons CO_2e per year.

Circling for A Parking Space - Currently, individuals driving to the Campustown Business District find it difficult to secure an open parking space on the street. It is filled with student parking, lucky business patrons or individuals that come early. This creates circling of the block numerous times before either giving up or finding an open space. By constructing the Intermodal Facility one block from this area, the amount of "circling" will be dramatically reduced. The reduction in gallons of gasoline and emissions is 663.9 gallons and 6.1 less tons CO_2e each year.

Connected Transportation Modes – By co-locating all transit vehicles open to the general public in one location, it is estimated that 59,716.9 fewer gallons of gasoline will be used each year which results in 553.2 less tons CO_2e emissions annually.

TOTAL ESTIMATED SUSTAINABILITY

Sustainability Measure	Savings
Vehicle Miles Traveled	1,782,871
Fuel (gallons)	67,893.7
CO_2e Emissions (tons)	624
Dollars Saved Annually ($33*metric tons CO_2e)	$20,592

SAFETY

Ames enjoys a significantly higher number of commuters using CyRide's public transit system as detailed in the 'Intermodal Facility Purpose and Urban Challenges Addressed" section of this grant as well as individuals currently walking or biking throughout the community. A positive result of this inclination toward alternative modes of transportation within the community is a lower level of traffic accidents which are trending downward as CyRide's ridership dramatically increases. This is also reflected in CyRide's nationally-recognized, award winning safety record. The construction of the Intermodal Facility is believed to reinforce this non-auto orientation by providing facilities

that will further encourage transit, bicycles and walking; however, the community was unable to quantify the Intermodal Facility's contribution to this continued low traffic accident rate.

PRIMARY SELECTION CRITERIA SUMMARY

- Economically Enhanced community – through the creation of 505 short *and* 505 long-term, quality jobs in an economically distressed business district.
- Livable community – through a connected transportation system, shared parking usage in the Intermodal Facility requiring fewer parking spaces, connected bike/pedestrian paths and trailheads, and facility amenities such as public restrooms for a business district and enhanced security through inclusion of the campus police station in the facility.
- Sustainable community – through a connected transportation system utilizing fewer natural resources, a building designed to Gold LEED standards and enhanced bicycle/pedestrian connects making daily commuting by alternative modes more attractive.

INTERMODAL FACILITY – RELATIVE TO SECONDARY GRANT SELECTION CRITERIA

INNOVATION

CyRide will utilize a portion of the TIGER grant ($1.5 million) to purchase and install an Automatic Vehicle Location (AVL) system on its vehicles combined with NextBus displays at the Intermodal Facility as well as transfer and shelter locations along the new shuttle route which will traverse the Campustown Business District and Iowa State University's campus. This technology will be incorporated into CyRide's website allowing its riders and its transportation partners to access information about the transit shuttle's schedule adherence allowing for timed connections to the intercity, HIRTA, and regional carriers. Real-time information will allow CyRide riders to easily utilize its services and connections to other modes of transportation and provide an incentive to leave their cars and use the public transportation options available at the Intermodal Facility due to its ease of use and real-time information.

This connectivity will further enhance the Campustown Business District, its revitalization and long-term economic benefit of Ames by the inclusion of this intelligent transportation system in creating an atmosphere in the business district where students and residents want to be. The AVL system can provide one additional piece of a "connected" vibrant and revitalized Ames activity center.

PARTNERSHIP

The level of collaboration and partnership in the Ames community around the Intermodal Facility has been extensive. Overall, more than 25 letters of support are provided by: Iowa's Senators and Ames Representative, the three project partners, stakeholders such as the Campustown businesses, transportation providers that will be housed in the facility including the HIRTA operation serving elderly and disabled persons in Ames and lastly community supporters including Iowa State University's student governments, human service agencies, Iowa DOT, Story County Board of Supervisors, Ames Chamber of Commerce, etc. This substantial support demonstrates the groundswell of excitement generated by the Intermodal Facility project.

This support is further demonstrated by the financial commitments made by Iowa State University ($2,799,318), the City of Ames ($483,332), CyRide ($204,000) and the possibility of the State of Iowa through the Iowa Department of Transportation ($880,000). Providing over $4.3 million dollars locally from a community of 52,000 in population demonstrates the community and state's commitment to making this Intermodal Facility a success under the grant as well as for the long-term impact of the community. While this is a large financial commitment for the community, the Intermodal Facility will not be possible without the TIGER grant funding.

A third aspect of the partnerships and collaboration created in Ames for this project, is the attendance at the two public meetings held on this project as well as the number of requests for presentations to organizations within the community. These were as follows:

- Two public meetings – Over 84 people attended providing comments in support of the project
- Presentations at:
  - Ames City Council
  - CyRide Board of Trustees
  - Iowa State University Senior Management (including the University President)
  - Story County Board of Supervisors
  - Government of the Student Body
  - Graduate and Professional Students Senate
  - City of Ames Historical Commission
  - South Campus Area Neighborhood Association
  - Campustown Businesses

FEDERAL WAGE RATE REQUIREMENTS

The Federal Wage Rate Certification requirement is provided as a link and also is included as the last page of this application that is not part of the 25 page limitation. Additionally, the State of Iowa has completed the following certifications: Section 1511, 1201(a) and (b) and 1607. Furthermore, CyRide understands and will comply with the ARRA reporting requirements as stated within the TIGER Federal Register vol. 74, No. 115 dated June 17, 2009 under the following sections: Section 1201(c): Maintenance of Effort; Section 1512: Reports of Use of Funds and Section 1609: Environmental Reporting

NATIONAL ENVIRONMENTAL POLICY ACT REQUIREMENTS (NEPA)

The local partners of CyRide, Iowa State University and the City of Ames, have been coordinating through the project planning and design process with Federal Transit Administration (FTA) Region VII staff regarding the environmental process that is appropriate for the proposed action. Through consultation with FTA, the partners have concluded that a documented categorical exclusion (dCE) is the appropriate document for recording the potential for environmental affects. The dCE has been submitted to FTA Region VII for approval.

The findings documented in the dCE are that the proposed Intermodal Facility will not result in a significant impact to the area's physical or social environment. As the potential for impacts is low, mitigation of identified impacts is reasonable, and that the proposed Intermodal Facility is consistent with activities appropriate for review through Categorical Exclusion, the criteria associated with 23 CFR Part 771.117 have been met.

Action by FTA on the submitted dCE is anticipated by mid October with resolution of any unanticipated issues by January 2010, prior to release of potential TIGER grants in February 2010.

ENVIRONMENTAL RELATED FEDERAL, STATE AND LOCAL ACTIONS

Listed below are the only identified permits/actions by others (other than the FTA action on the dCE) and the current understandings associated with the Intermodal project:

- Although the entire Intermodal Facility lies outside the Floodway Fringe, an access road is planned to span College Creek. A Flood Plan Development Permit and a Conditional Use Permit issued by the City of Ames are required for this structure. These two permits will be requested at the completion of final engineering, scheduled for April 2010 and will be received within 30 days. This permit will not affect CyRide's ability to complete the project within the grant schedule.
- If College Creek drains more than two square miles of area upstream from the proposed stream crossing, Iowa DNR approval of the structure is required. Determination of the extent of the College Creek drainage area will be completed as part of the final engineering phase scheduled for completion in April 2010. If the two-square mile drainage area threshold is exceeded, the Iowa DNR permits will be obtained. If needed, these permits are typically received with 60 days of request and will not affect CyRide's ability to complete the project within the grant schedule.