



Jackson Amtrak Depot Intermodal Feasibility Study Phase II Report - Revised

Jackson, MI



September 19, 2005

TABLE OF CONTENTS

Introduction 1
Methodology..... 1
Program and Needs Assessment.....2
Conceptual Design6
Conclusions..... 12
Program Needs and Fulfillment Comparisons 13

Appendix A: Program Notes and Prioritization

Appendix B: Workshop Attendance

Drawing Index

- Sheet A1: Site Plan
- Site Plan: Concept 1
- Floor Plan: Concept 1
- Site Plan: Concept 2
- Floor Plan: Concept 2
- Site Plan: Concept 3
- Floor Plan: Concept 3

Introduction

Phase II of the Jackson Amtrak Depot Intermodal Feasibility Study had two primary goals: 1. To identify and quantify the programmatic needs of such a facility, from the standpoint of the primary transportation-related uses and compatible tenant uses, and 2. To develop a number of conceptual plans to explore how these needs could be incorporated into the existing project site, to study their impact on the site's historic architectural and cultural resources, to identify the significant strengths and weaknesses of each concept, and to describe the project costs associated with each concept.

This report summarizes the project team's approach to meeting these goals, findings of the needs assessment, and the alternative conceptual plans. The concepts take into account immediate transportation requirements and plan for anticipated needs for the next ten years.

Methodology

At the conclusion of Phase I, representatives of the project team met with the Intermodal Study Committee and other community representatives (see Appendix B-1 for full list of attendees). After a review of the Phase I report, all attendees participated in a workshop, to identify potential program elements that are responsive to the needs and desires of the community.

The results of this workshop were recorded and incorporated into a programming outline (included as Appendix A), along with data provided in the original Request for Proposals, and additional information provided by representatives of the various transportation interests on the project. Program elements were then reviewed and prioritized, and common elements and requirements which could potentially be combined were noted.

The workshop generated a wealth of ideas for potential programming and use of the facility; so much, in fact, that priorities had to be established to determine which functions to incorporate into the conceptual designs. Prioritization of program elements was based on the following criteria:

- Program uses directly required for a functioning intermodal station were given highest priority. These elements include the program requirements for the train station and bus station, as well as taxi service, and pedestrian and automobile access.
- Program uses that directly support the primary program uses were given next priority. These include elements such as security and police facilities.
- Program uses that provide amenities and/or potential revenue were given the next priority. Examples of these uses include retail establishments, restaurant, cafe, or food court.
 - Compatibility of the program use with the existing buildings and the primary program goals: preference was given to uses that are compatible with the existing buildings and site and their primary use as an intermodal station. For example, small retail establishments provide convenience for station users, but a large "anchor" store would have parking and receiving program requirements that would conflict with pedestrian and vehicle flow on the site.
 - Potential for revenue generation: among uses which were identified as compatible, preference was given to those which seem to have good revenue potential within the context of the intermodal facility. This was considered not only from the standpoint of dollars per square foot generated, but also whether such a use would have to heavily rely upon outside traffic to be sustainable. For example, a restaurant may be able to draw business in to the site, where a retail establishment would rely primarily on station users. Availability of parking, hours of peak use relative to peak use of the station, and public visibility will all have an impact on the viability of these businesses.

Once the program parameters were established, conceptual layouts were developed. Like the program, several criteria were used to develop layouts. These include the following:

- Respond to surrounding site characteristics, including circulation patterns, vehicle traffic, and pedestrian access to the site and buildings.
- Respect existing businesses and their properties. Avoid changing access to the stores and parking lots.
- Fully utilize the existing Amtrak property and the buildings before consideration of new structures on site.
- Consider specific design requirements put forth in the Request for Proposals (items noted as RFP in Appendix A).
- Combine compatible uses where possible.
- Place uses adjacent to related supporting uses and adjacent to appropriate site access.
- Incorporate adjacency and separation requirements of Amtrak and Jackson Transportation Authority (JTA).
- Provide efficient circulation, both on the site and within the buildings.
- Arrange spaces to take best advantage of and respect the buildings' design and historically-significant features.

Several concepts and variations were developed and distilled to the three concepts presented herein, with each building design concept paired with a site design concept.

Program and Needs Assessment

The program used for development of the conceptual layouts is based on the prioritized outline included in Appendix A of this report, which was generated based on the results of the needs assessment. This assessment was developed from needs and use concepts obtained during the workshop conducted on May 13, 2005, and additional programming provided by Amtrak and the JTA, Michigan Department of Transportation (MDOT) track clearance requirements, and consultation with representatives from Norfolk Southern, MDOT, Greyhound and Indian Trails. Prioritization was accomplished using the criteria described in the Methodology section of this report.

The focus of the conceptual design was centered on re-use of the existing buildings for primary transportation functions and providing proper site access and circulation, rather than attempting to encompass all of the program ideas presented in the program outline. As a result, the majority of the square footage in the existing buildings is taken up by the primary functions, leaving little room for auxiliary uses such as retail or commercial tenant space. While the potential for additional construction to house these uses exists, placing it in separate buildings on the site could result in city-owned commercial development to support the adjacent transportation facility. This could prove to be an effective source of funding for operation of the facility, although it obviously adds another dimension to the project. Integrating this development with the parking needs of the facility will also be a consideration, as parking would require a large portion of the area identified for potential expansion.

Program Assumptions

In developing the conceptual program and designs, a number of factors were assumed as given for the purpose of providing a starting point in design. Like other aspects of the concepts, these are subject to validation and may change as the project progresses. These assumptions include the following:

- Platform Length: The boarding platform on each side of the railroad tracks is set at six hundred feet in length in the conceptual designs, to accommodate longer trains with higher passenger capacity. The current platform on the north side of the track is approximately 550 feet long, with about 296 feet covered by the depot's current platform canopy.
- Platform Design: A low platform configuration will be required for this project. Although a high platform would provide more straightforward wheelchair access to trains, such a modification would prove technically infeasible, given the finish floor elevation of the depot building and the configuration of the historic platform canopy. Norfolk Southern Railroad has also indicated that they would prefer the low platform. It is anticipated that some reconfiguration of the platform curb will be required to accommodate the 8-inch dimensional clearance from the top of rail elevation to the top of curb. This could be combined with elimination of the current step in the platform. A portable wheelchair lift and storage corral will be required to serve the platform.
- Terminal Facilities: It is assumed that terminal facilities for trains, including rail yard facilities, standby power, fueling and watering, will not be required at this station. Maintenance and fueling facilities for buses will also remain off site.
- Crew and Driver facilities: It is assumed that crew facilities for trains and driver facilities will not be located on site.
- Combination of Functions and Compatible Uses: Where opportunities present themselves, common supporting program requirements have been combined to increase the efficiency of the design. Such shared facilities may include waiting areas, restrooms, vending machines and related items.

Critical Uses

As discussed in the Methodology section of this report, first priority in program was given to primary transportation uses, and to uses that directly support the primary transportation uses. These elements are listed below, along with approximate square footages required. (SF = square feet, GSF = gross square footage, including an allowance for circulation of 20-25 percent).

Amtrak Train Station: 4,800 GSF

- Waiting Area: 2,500 SF
- Ticket Sales: 120 SF
- Agent's Office: 150 SF
- Accounting Office: 80 SF
- Staff Toilet: 40 SF
- Baggage Area: 900 SF
- Storage: 80 SF

JTA Bus Transfer Station (incorporates Greyhound station): 3,500 GSF

- Waiting Area: 2,500 SF
- JTA Agent's Counter: 50 SF
- Greyhound Agent's Counter: 50 SF
- Accounting Office: 80 SF
- Break Room: 100 SF
- Staff Toilet: 40 SF
- Baggage and Package Express Area: 50 SF

Security Office: 600 GSF

- Monitor Console with two guard stations: 150 SF

- Staff Toilet: 40 SF
- Lockers: 50 SF
- Office: 150 SF
- Break Room: 100 SF

Other Potential Program Items

Based on consideration of the criteria set forth in the Methodology section of this report, several other compatible tenant uses with strong potential for drawing business and generating revenue were identified and selected for incorporation into the project. Designations of tenant spaces on drawings are somewhat flexible. Actual uses may vary depending on rental market conditions.

Restaurant

A high-quality restaurant not only has strong revenue potential, but can also act as a powerful draw to attract people into the downtown area. This use may require a significant amount of square footage and nearby parking, as well as convenient access and good exposure. Locating it within or near a transportation center would accommodate these requirements. Moreover, the later operating hours of a restaurant will promote a feeling of security because of the presence of people on the site, both restaurant patrons and staff. This will create a more comfortable experience for late-night travelers. Restaurant patrons arriving after six o'clock in the evening will also find plenty of parking available after peak transportation hours. Another advantage of this use is that it can be established early on in the project's master plan, so that the revenue stream can help support continued maintenance and rehabilitation of the project site.

Cafe

A cafe or sandwich shop can readily serve travelers throughout the day, and can accept walk-in traffic from surrounding areas. This type of establishment will have lower overhead and less infrastructure demand than a full-service restaurant, and may therefore present a lower investment risk, although the revenue from rent will likely be lower as well. The seating area could potentially be shared with circulation for the building, and could also be set up for wireless internet.

News Stand / Convenience Store

Similar to a cafe, a convenience store and news stand can serve travelers as well as walk-in traffic, selling sundries, newspapers and magazines, paperbacks, aspirin, and/or candy. This would likely be a small venue, and not the largest income generator, but would be convenient for passengers and compatible with the intermodal transportation program.

Small Retail Vendors / Food Court

An open mall area with small retail or food service booths would provide flexibility and various options for visitors to the site. Such establishments thrive where they can keep their overhead to a minimum and take advantage of a large public exposure. For this reason, a food court or small retail booth arrangement may have a tough time remaining viable, unless there is a considerable volume of people already on site. Ideally this arrangement should be close to where the most people are coming through, such as a main entrance or a heavily-traveled circulation path. Beyond station users, however, these establishments may not be able to draw in business unless they are conveniently accessible. Lack of exposure outside of the station may prove to be an issue as well. Therefore, it is likely that these vendors will not be able to generate a reliable revenue stream until the intermodal station is well-established.

Site Planning Issues

Intermodal Stations are a relatively new idea for Michigan, and must be as enjoyable and offer as competitive an experience as possible to personal vehicles to get people out of their cars and using rail service. Ways of avoiding unnecessary hassles must be considered. Intermodal stations need to be easy to find, access, and be efficient and convenient. Therefore, in terms of site planning, access and visibility are the key issues. Ensuring people, buses, taxis and cars can all interact with the site while not creating traffic conflicts, tie ups, or frustrating way finding solutions is also essential.

Site planning issues are organized by transportation type:

Bus:

In considering potential site configurations for the adaptive reuse of Jackson's Depot and Express buildings, concepts started by considering the most challenging user – buses. Bus service needs to have stacking space, a covered drop off / pick up zone for at least 10 city buses and 2 inter-city buses that is accessed by pedestrians safely, have enough room to maneuver without backing up, and be visible from an indoor space. Bus idling must also be considered, as it can be a nuisance, and should be located as far as possible from residences and retail operations that offer outdoor seating. If the Intermodal becomes a regional bus pulse point, then timing the departure of more than 5 buses at one time is also a consideration.

Auto:

Taxis and cars are the most flexible users of the station but still create issues that need to be addressed. Auto users will often look for parking as close to their destination as possible, even if it is a restricted zone. Competitive drop off / pick up zones must be located to discourage improper use of the site. A designated taxi stand, or call station should be located near a major building exit/entrance. Short and long term parking need to be within a 500-foot distance of the users' destination with clear site lines, ample lighting, and few pedestrian conflict areas (streets with heavy bus or passenger traffic). Due to the linearity of the site, the boundaries of Cooper Street and Michigan Avenue, historic site elements, and the block of existing viable businesses, potential parking areas are located on the east side of the site.

Streets adjacent to the site form a modified grid which affords an efficient dispersal pattern for all vehicles, with the exception of the driveway directly adjacent to the North side of the Depot building. With the anticipated volume of users in the coming years, coupled with the configuration of Michigan Avenue and limited sight lines at the intersection with Cooper Street, most site programming concepts remove the one block driveway. While this does eliminate a convenient drop off/pick up area, public safety is increased by creating a larger safe pedestrian zone adjacent to the depot.

Rail:

While the train is on a fixed rail, there are other concerns that must be considered in site programming. Train arrivals cause peaks in usage when many people flood the site. These peak periods need to have ample "float space" – areas where passengers can prepare / readjust, and walk without being in conflict with automobile traffic. Plazas in front of transportation stations are created for just this reason. The concept dovetails well with the closing of the parking area in front of the Depot Building. On the other side of the building, the passenger platform is expected to be 600 feet in its final configuration, requiring sufficient area for the canopy structure and for pedestrian circulation.

Non-Motorized / Pedestrian:

One of the goals in rehabilitating the Depot building is to take advantage of its convenient location near Downtown Jackson. Many users will walk or travel by bike to the Intermodal Station. The Riverwalk along the Grand River should be extended and integrated into any pedestrian/non-motorized access solution for the site. As with any pedestrian facilities, all walks and amenities will be required to conform to the Americans with Disabilities Act (ADA) standards. Accent lighting, an area for bicycle parking, and seating areas will all improve the Intermodal Station for non-motorized users.

Finally, the Depot and Express buildings, as well as Le Grande Square, have significant architectural details and civic importance that should not be compromised. Whenever possible, modernization due to site improvements should be located in non-prominent locations and not within established view corridors. Traditional uses should also be relocated to their historic location whenever possible as long as public safety and the creation of an efficient and convenient intermodal station are not compromised.

Potential for Future Growth

The Chicago-Detroit (Pontiac) passenger rail route that serves the Jackson Depot has been designated as a "high-speed" rail corridor by the Federal Railroad Administration. The train frequency could increase from 3 round-trips per day to as many as 6 to 12, increasing the number of passengers served by the station.

Since 1996, the Michigan Department of Transportation (MDOT) has been a participating State in the "Midwest Regional Rail Initiative" (MWRRI), which is an ongoing effort to develop an improved and expanded passenger rail system in the Midwest. All future expansion at the Jackson Depot for trackage, platforms, or other passenger related issues shall be in accordance with the MWRRI Executive Report of September, 2004, and considered separately from this feasibility study.

Conceptual Design

Character of Design

The existing Amtrak property and buildings form a very linear composition. While this is conducive to the primary program as a transportation facility in some ways, in other ways it presents a challenge. Spaces must be spread out along the length of the site, where they may be better suited to being clustered together. Such a challenge particularly manifests itself in incorporating parking and retail tenant uses into the site.

The location of the buildings at the western edge of the property, cornered in by the railroad, Cooper Street, and Michigan Avenue, redoubles this challenge, because it is impossible to expand the Depot Building, and very difficult to provide safe vehicle access for pickup and drop-off or bus traffic in close proximity to the Depot Building. As a result, all the design concepts are very linear in nature. Because the overall length of the Depot Building and Express Building together is close to 500 feet, the project team avoided extension of buildings to the east of the existing buildings where possible, to avoid excessive foot-travel distances for building users.

One of the key factors in design of this facility is the historic nature of the buildings and site. All concepts reflect the importance placed on respect for the character of these cultural resources. Some degree of intervention in the building's historic fabric by new design elements is inevitable, because some portions of the building's use will change, and because of the demands of modern program requirements. The type and severity of these interventions varies from concept to concept, and each will be discussed in detail further on in this section. However, the effort was made to match

program elements with the historic uses of each space, so that new uses are compatible with the character of that space, or at least may be inserted without severely disrupting the historic fabric of the space.

Three conceptual program layouts are presented as part of this report. A brief review of each concept, its relevant strengths and weaknesses, and its impact on the historic fabric of the buildings and site, follows below.

Costs

Preliminary construction costs are difficult to estimate accurately at the conceptual level. Little is usually known about the character and quality of design and construction, other than general configuration and size of the project, and therefore detailed estimates of materials and labor are meaningless and inaccurate.

To begin to understand the cost of renovation for the existing buildings, construction of new buildings, and utility and site improvements, the project team reviewed a sampling of previous rehabilitation and adaptive re-use projects, considering overall cost, square footage, and scope of work. Because no two historic preservation projects are ever alike, projects of a variety of sizes and complexities were considered, and weighted due to various factors, such as extent of restoration work versus new construction within the existing shell, and economy of scale (a larger project will generally have a lower cost per square foot than a smaller project of comparable quality). Costs were escalated 3 percent per annum from the date of project completion. Estimates for land acquisition cost were based on recent experience with other projects in Jackson. Design fee estimates are based on estimated percentage of construction cost, and weighted for the anticipated complexity of the project.

Concept I

In this scenario, bus queue and idle space is provided along Plymouth Street, between Perrine Street and the Express Building. Buses move into position for passenger transfer adjacent to the Depot Building, entering at the current curb cut on Michigan Avenue at the west end of the Depot Building. A designated turn lane and traffic light will be necessary to accommodate busses entering at this location. The easternmost portion of the Amtrak Property is given over to site parking, and the block between Elizabeth Street, Plymouth Street, Van Dorn Street, and Perrine Street would be a convenient location for future parking expansion. Additional on-street parking is provided on Van Dorn Street and Perrine Street.

Bicycle locker storage is located in the pedestrian courtyard between the Depot and Express Building.

Bus Station and Train Station functions are placed together in the Depot Building, using the original waiting room as a combined waiting area for both services. Ticketing for Amtrak is moved to the west end of the waiting room, to allow for direct adjacency to other Amtrak program functions. Bus ticketing is located where the women's restroom is currently in the building. The historic ticket office becomes a small news stand or other walk-up type retail use, allowing it to retain its basic historic characteristics.

The mezzanine level that currently exists at the west end of the Depot Building has been removed in order to restore the space to its original proportions. The basement level, while spacious, would require an extensive amount of work to make it habitable, therefore we recommend it be used for auxiliary functions such as mechanical equipment and storage space.

The towers' upper level poses an accessibility challenge. If these areas are to be utilized by the public, they may require the installation of an elevator which can be costly and cumbersome. Concept I shows the east tower's use as tenant offices accessed by an elevator and stairs. The west

tower is designated for security offices, which because of the nature of their use are less likely to require elevator access.

The Express Building and the Depot Building's baggage room addition are given over completely to tenant uses, such as a restaurant, retail store, or several smaller vendors. Possible expansion for an enclosed seating area is indicated within the elbow of the Express Building plan.

Strengths of Concept I

- Both of the primary intermodal components are within the historic depot building.
- Public service functions such as waiting areas, restrooms and vending machines are easily accessible to both bus and train passengers.
- Location of Amtrak and JTA/Greyhound agent desks provide excellent visual control of waiting areas.
- The shared waiting area allows for good flexibility of capacity - for example, if prior to a bus transfer there are many bus patrons but only a few train patrons, the bus patrons can overflow into the excess train waiting area, and vice-versa.
- Good visibility of arriving trains and buses for all users.
- Few changes will be required along the existing streets.
- All modifications occur on existing Amtrak property. No new land acquisition is necessary.

Weaknesses of Concept I

- The combined waiting area is large enough for current user capacity; however, with future growth it may prove too small during peak times.
- Delivery, receiving, and trash handling for a larger retail or food service tenant in the express building may be an issue due to the exposure of public uses on all sides of the building.
- There is a significant traffic conflict with bus circulation on Michigan Avenue. A dedicated bus lane will have to be designated and a new traffic light installed in order for the buses to enter at the current Depot parking entrance adjacent to the intersection with Cooper Street.
- Only a few buses at a time are able to load directly adjacent to the Depot Building, simply due to its length and location on site. This is potentially a major deficiency.
- To provide covered walks to all buses at once may introduce canopies in locations that are less visually desirable.
- Because the bus queuing, idling and loading areas are spread throughout the site, the drop-off zone and taxi stand are not located adjacent to the Depot.
- Users traveling on foot from parking areas will be walking past idling buses, exposing them to the associated noise and exhaust fumes.

Impact on Historic Resources

- Although the historic ticket office can be preserved essentially intact, and its currently concealed portions restored, it will be serving a different, though compatible, use.
- The opportunity to reconstruct the basic form of the old news stand and separating arch adjacent to the ticket office is viable in Concept 1.
- A new canopy is introduced along the north side of the Depot Building, to shelter bus passengers during boarding. Although a canopy existed here previously, the new canopy will be longer, extending the entire length of the Concourse. This can be done sensitively, respecting the Depot Building's design, proportions and details.
- The expansion seating area of the Express Building is a new addition and will therefore have an impact on the appearance of this building. Such an addition can be done sensitively, respecting eave lines and the rhythm and proportions of the building.

Conceptual Costs:

| | |
|-------------------------------|-------------|
| Site and Utility Improvements | \$1,400,000 |
| Building Renovation | \$5,000,000 |
| Hazardous Materials Abatement | \$200,000 |
| New Construction | \$0 |
| Subtotal | \$6,600,000 |
| Land Acquisition | \$0 |
| Design Fees | \$600,000 |
| Allowances (20%) | \$1,500,000 |
| Grand Total | \$8,700,000 |

Concept II

For Concept II, buses load around a pedestrian island adjacent to the Express Building, exiting at the intersection of Perrine and Plymouth Streets. Parking is provided in the block bordered by Elizabeth, Perrine, Plymouth, and Van Dorn Streets, and also at the easternmost portion of the Amtrak property. Passenger drop-off, short term parking, and taxi stand areas are located in the vicinity of the Depot Building. Angled parking just east of the Express Building allows for more short term parking. Plymouth Street west of Perrine Street, and Van Dorn Street south of Elizabeth Street, would be reconfigured in this concept.

Bicycle locker storage is located at the west end of Le Grande Square.

The Train Station remains in the Depot Building, and the Bus Transfer Station is housed in the Express Building. The two buildings are connected by an entrance and throughway. Ticket sales for Amtrak remain in the historic ticket office, which also houses the ticket agent's office and an accounting office, to avoid movement of cash through public areas. Baggage handling, however, will require movement through the public waiting room to the baggage area to the west. Alternately, direct access can be accommodated so that checked baggage can be passed from the ticket booth to carts on the platform.

Tenant business areas are spread throughout the facility, located in one wing of the Express Building and in part of the Depot's baggage room. A sandwich shop or other small foodservice operation could be placed in the Depot Building, east of the waiting room. Users traveling between the train and bus areas would pass through the seating area. At the west end, a cafe or other small retail tenant space could greet traffic approaching from Downtown.

The mezzanine level and basement of the Depot Building will be treated as described in Concept I. The second floors of the towers are also similar to those in Concept I.

Strengths of Concept II

- Good proximity of bus and train functions to bus boarding areas, entrances and vehicle drop-off zones.
- Tenant/Retail spaces are prominently located, providing excellent exposure.
- Ticket sales desks have good visual control over their respective waiting areas.
- Good visibility of arriving trains and buses for all users.
- The site plan offers good circulation, with few pedestrian/bus conflicts, and adequate drop-off and pickup zones.
- Primary vehicular access is one block away from the Cooper Street/Michigan Avenue Intersection, which reduces traffic conflicts identified in Concept I.

- Generous indoor waiting areas are provided for both bus and train passengers, in locations convenient to boarding areas.

Weaknesses of Concept II

- Not all programmatic adjacencies required by Amtrak can be met in this concept, due to the remoteness of the historic ticket office. Specifically, the separation of the baggage area from the ticket agent's office does not meet current Amtrak requirements.
- Security of the accounting office will also be a consideration in design, though this may be accomplished by a combination of pattern glass in some windows with security grilles behind and non-advertisement of its location.
- Delivery, receiving, and trash handling for a larger retail or food service tenant in the Depot Building may be an issue due to conflicts with vehicle and pedestrian circulation.

Impact on Historic Resources

- The re-use of the historic ticket office for its original purpose is a positive factor. However, modifications will likely be necessary to make it fully barrier-free accessible.
- The original waiting room is recaptured in this concept for use by train passengers.
- A connector structure will unite the Depot Building and Express Buildings in this concept. It will have to be carefully designed so as not to compete with or dominate the massing of the historic buildings.
- The original entrance canopy on the north side of the Depot Building may be fully reconstructed as part of this concept.

Conceptual Costs:

| | |
|-------------------------------|-------------|
| Site and Utility Improvements | \$1,400,000 |
| Building Renovation | \$4,500,000 |
| Hazardous Materials Abatement | \$200,000 |
| New Construction | \$500,000 |
| Subtotal | \$6,600,000 |
| Land Acquisition | \$800,000 |
| Design Fees | \$600,000 |
| Allowances (20%) | \$1,600,000 |
| Grand Total | \$9,600,000 |

Concept III

In Concept III, buses enter the site on Park Avenue, and load at a pedestrian island adjacent to the Express Building off Elizabeth Street. Parking is provided to the east as in Concepts 1 and 2. Potential parking expansion is identified on the next block east of Perrine Street, between Elizabeth and Plymouth. Park Avenue and Elizabeth Street from Park to Perrine will become one way for all vehicles. Plymouth Street is closed west of Perrine Street, and Van Dorn Street is closed south of Elizabeth Street. Vehicle Drop-Off and Taxi Stand zones are provided on Park Avenue adjacent to the Depot and at the west end of the parking lot adjacent to the Express Building.

Unlike previous concepts, in Concept III the majority of the Depot Building is given over to tenant use, in this case a restaurant. A small retail space is located in the east tower, with a security office above. Amtrak's station facilities are relocated to the baggage room addition area, with the ticketing desk facing a new connecting atrium area between the existing buildings. Bus ticketing and support spaces occupy a portion of the Express Building, which also houses public restrooms and more flexible retail space.

The mezzanine level and basement of the Depot Building will be treated as described in Concept I.

Concept III shows the east tower's use as security offices, similar to Concepts I and II, and the west tower as mezzanine seating for the café/bar below. An elevator is not required in this case because barrier free seating is available at the first floor.

Strengths of Concept III

- Revenue-generating tenant space is maximized.
- Tenant/Retail spaces are prominently located, providing excellent exposure.
- Ticket sales desks have good visual control over their respective waiting areas.
- The site plan offers good circulation with adequate drop-off and pickup zones, although there are more pedestrian crossings of vehicle paths than Concept II.
- Primary vehicular access is one block away from the Cooper Street/Michigan Avenue Intersection, which reduces traffic conflicts identified in Concept I.

Weaknesses of Concept III

- Delivery, Receiving, and trash handling for a larger retail or food service tenant in the Depot Building may be an issue due to conflicts with vehicle and pedestrian circulation. This is a major design issue for this concept.

Impact on Historic Resources

- This concept will cause a shift from rehabilitation to adaptive re-use for the Depot. However, if the interior spaces are planned and designed carefully, they could take advantage of and feature many of the historic materials and elements present within the building, such as ornamental plaster walls and ceilings, and the historic ticket office.
- Like Concept II, a connector structure will unite the Depot Building and Express Building. In Concept III, however, this structure between the buildings becomes much larger and more prominent. That it serves as the primary entrance for the facility puts it at risk of overwhelming the existing buildings visually. Should this concept be developed further, this will be a critical design consideration.
- The original entrance canopy on the north side of the Depot Building may be fully reconstructed as part of this concept.

Conceptual Costs:

| | |
|-------------------------------|--------------|
| Site and Utility Improvements | \$1,400,000 |
| Building Renovation | \$4,500,000 |
| Hazardous Materials Abatement | \$200,000 |
| New Construction | \$1,250,000 |
| Subtotal | \$7,350,000 |
| Land Acquisition | \$1,200,000 |
| Design Fees | \$600,000 |
| Allowances (20%) | \$1,850,000 |
| Grand Total | \$11,000,000 |

Conclusions

The broad variations between the three concepts demonstrate that there are a variety of approaches to the design opportunities of this project. Each has its own strengths and challenges, and the preferred design may take on aspects incorporating the strengths of each. Not all possibilities have been shown, and other ideas can certainly be taken into consideration for the next phase. The project team looks to the Intermodal Study Committee and the public meeting for feedback to inform the design for Phase III.

Program Square Footage Comparison

| Program Needs | (GSF) | Concept 1 (GSF) | Concept 2 (GSF) | Concept 3 (GSF) |
|---|--------------|--------------------|--------------------|--------------------|
| Amtrak Train Station Waiting Area Ticket Sales Agent's Office Accounting Office Staff Toilet Baggage Area Storage | 4,800 | 4,050 | 5,750 | 5,520 |
| JTA Bus Transfer Station Waiting Area JTA Agent's Counter Greyhound Agent's Counter Accounting Office Break Room Staff Toilet Baggage Area | 3,500 | 2,805 | 3,220 | 1,520 |
| Security/Police Monitor Console Guard Stations Staff Toilet Lockers Office Break Room | 600 | 1,110 | 1,030 | 1,050 |
| Tenant Restaurant Café Food Court News Stand Retail | | 8,780 | 6,655 | 14,055 |
| Support/Public Corridors Toilet Rooms Vending Machines Lobbies | | 1,690 | 3,910 | 500 |
| Total | 8,900 | 18,435 | 20,565 | 22,645 |
| Existing Depot Building | | 13,625 | 13,625 | 13,625 |
| Existing Express Building | | 4,810 | 4,810 | 4,810 |
| New Construction | | 0 | 2,130 | 4,210 |

Program Fulfillment Comparison

| | Concept 1 | Concept 2 | Concept 3 |
|-------------------------|-----------|-----------|-----------|
| Site | | | |
| Parking | ⊙ | ⊙ | ⊙ |
| Drop Off Zone | ○ | ● | ● |
| Taxi Stand | ○ | ● | ● |
| Bus Circulation | ○ | ⊙ | ● |
| Pedestrian Access | ○ | ● | ● |
| Traffic Impacts | ○ | ⊙ | ⊙ |
| Street Changes | NO | YES | YES |
| Additional Property | NO | YES | YES |
| Buildings | | | |
| New Construction | NO | YES | YES |
| Historic Sensitivity | ● | ● | ● |
| Prominent Retail | ⊙ | ● | ● |
| Program Adjacencies | ● | ○ | ● |
| Deliveries and Trash | ○ | ○ | ○ |
| Program Square Footages | ⊙ | ● | ⊙ |
| Security | ● | ● | ● |

Key

● Excellent

- Acceptable
- Problematic

**Jackson Amtrak Depot Feasibility Study
Program Notes and Prioritization**

15 April 2005

| <i>Revision</i> | <i>Date</i> | <i>by</i> |
|--|-------------|-----------|
| Add Amtrak Reqs - See Amtrak Spreadsheet | 4/21/05 | PMR |
| Add JTA Reqs | 4/28/05 | PMR |
| Prioritization | 5/8/05 | PMR |

I. Character of Design

- A. Respectful of the historic character of the site. [Idea Boards] [RFP]
 - 1. Appropriate lighting of building and site
 - 2. Second oldest station in continuous operation.
- B. Connection/Transition of urban fabric [Idea Boards]
 - 1. River Walk (Connections to Armory Arts Project)
 - 2. Central Location
 - 3. Nexus for Industrial, Commercial, Residential and Downtown areas.
 - 4. Entryway to Downtown
 - 5. Proximity to Consumers Energy - Continuity of Development
 - 6. Proximity to Hospital
 - 7. Connect to Improved Neighborhoods
- C. Contextual Sensitivity [Idea Boards]
 - 1. Tie in with Riverfront improvements
 - 2. Tie to surrounding neighborhoods/districts with landscaping
 - 3. Promote uses compatible with surrounding area
- D. Sustainable Design [Idea Boards]
- E. Challenges to Design [Idea Boards]
 - 1. Cooper Street crossings / Problem Intersections
 - 2. Pedestrian Access across Cooper and Michigan
 - 3. Attractiveness of Area
 - 4. High Vacancy Area
 - 5. Adjacent Land uses (bars, etc.) are potentially problematic.

II. Critical Program Items (Items critical to basic design criteria for facility)

- A. Intermodal transportation facility. [Idea Boards] [RFP]
 - 1. Amtrak / Railroad
 - a. Current: 6 trains daily, 75 peak capacity
 - b. Potential: 12-20 trains daily, 100-150 peak capacity
 - c. Waiting Space
 - i. 75 Seats, 1500 sf current, 20 sf/seat [Amtrak]
 - ii. Adjacent to Ticketing
 - iii. Adjacent to public restrooms
 - iv. Include telephones/vending or adjacent to common area.
 - d. Ticketing
 - i. 1 counter position currently, 50 sf [Amtrak]
 - ii. 1 barrier-free additional position required currently, 63 sf [Amtrak]
 - iii. Baggage pass with scale and LED readout for each counter position [Amtrak]
 - iv. Message Printer at counter [Amtrak]

- v. Security cameras [Amtrak]
- vi. Security Glazing or Overhead Coiling Grille [Amtrak]
- e. Administrative Offices (2 employees - secure and separate)
 - i. Agent's Office, with closet, 150 sf [Amtrak]
 - ii. Accounting Office, 80 sf [Amtrak]
 - iii. Storage, 80 sf [Amtrak]
 - iv. Employee Lounge - Not required, but look at combining with ticketing [Amtrak]
 - v. Employee Restroom - 40 sf (min. size will be dictated by barrier free req's) [Amtrak]
- f. Special Requirements
 - i. Prisoner Transfer
 - ii. Baggage transfer included in grade crossing [Amtrak]
- g. Platform
 - i. Covered Canopy
 - ii. Appropriate length
 - iii. Height-above rail requirements
 - iv. Include tactile edge for barrier free [Amtrak]
- h. Baggage
 - i. Baggage Room 900 sf current, adj. to Ticketing [Amtrak]
 - ii. Baggage Pickup 150 sf current, adj. to Waiting [Amtrak]
 - iii. Security Screening? [SG]
 - iv. Foresee need to add conveyors or storage with increased traffic? [SG]
- 2. JTA / Intra-city Bus (pulse system)
 - a. Current: Pulse system, 8 buses daily, 140 peak capacity
 - b. Potential: 10 buses daily, 175 peak capacity
 - c. Space for 12 buses to load concurrently
 - d. Waiting Space 2000-3000 SF
 - e. Queue Space for buses (site)
 - f. Idle Space for buses (site)
 - g. Office
 - h. Break Room
 - i. Staff Restroom
- 3. Greyhound / Intercity Bus (Integrate with JTA)
 - a. Current: 4 buses daily
 - b. Potential: 8 buses daily
 - c. Waiting Space
 - d. Ticketing Services
 - e. Baggage (20 sf current)
- 4. Taxi Service
 - a. Taxi Stand - with weather protection
 - b. Queue Area with call button
- 5. Private motor vehicles
 - a. Drop-Off (with weather protection) / Circulation
- 6. Bicycle
 - a. Racks / Storage facilities
- 7. Pedestrian

- B. Accessibility and Convenience [Idea Boards] [Code]
 - 1. Barrier-free facilities
 - 2. Wayfinding
 - 3. Information Desk/Kiosk
 - 4. Vending Machines
 - a. Amtrak, JTA/Greyhound waiting areas, or in common area
 - 5. Electronic/Changeable Information Signage
 - 6. Pay Phones [Amtrak]
 - a. Amtrak, JTA/Greyhound waiting areas, or in common area
 - C. Security [Idea Boards]
 - 1. Police Substation
 - 2. Full-time security on Site
 - 3. Lengthen hours of operation for early and late departures/arrivals.
 - 4. Adequate lighting
 - D. Parking [Idea Boards]
 - 1. Short Term: 30 spaces
 - 2. Long Term: 100 spaces
- III. Non-Critical Program Items (Compatible program items)
- A. "Destination" Restaurant [Idea Boards]
 - 1. Bar/Lounge
 - 2. "Themed" Train Rides
 - C. Food Court [Idea Boards]
 - 1. Wi-Fi Hot Spot / Internet Cafe
 - 2. Cafe / "Affordable" Food
 - 3. Ice Cream
 - B. Convenience Store [Idea Boards]
 - 1. Newsstand
 - 2. Snacks
 - 3. Soda
 - 4. Groceries/Produce
 - D. Services [Idea Boards]
 - 1. Child Care
 - 2. Copy Shop
 - 3. Florist
 - 4. Dry Cleaning
 - 5. Western Union
 - 6. UPS Store
 - 7. Drug Store
 - 8. Travel Agent
 - 9. Bank/ATM
 - 10. Bike Rentals
 - E. Boutique/Specialty Shops [Idea Boards]
 - F. Community Functions [Idea Boards]
 - 1. DDA Offices
 - 2. Chamber of Commerce

3. Event/Meeting Space
4. Community College
5. Local offices for Congress/Senate
6. Tourism information

G. Professional Offices [Idea Boards]

1. Architect/Engineer/Planner
2. Attorney

H. Theme-based gift shop, museum or display [Idea Boards]

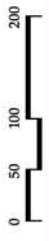
1. Railroad
 - a. Train Club
 - b. Railroad Museum
 - c. Relocate Locomotive on Lansing Road (can be accomplished on site)
2. Automotive
 - a. Auto Heritage Route

**Jackson Amtrak Depot Feasibility Study
Workshop Attendance**

13 April 2005, 2:00 pm.
City of Jackson Purchasing Department Conference Room
Temporary City Hall, Jackson, Michigan

Present

| | |
|-------------------|----------------------------------|
| Mara Braspenninx | SmithGroup |
| Patrick Roach | SmithGroup |
| Gene Hopkins | SmithGroup |
| Paul Fontaine | JJR |
| Patrick Doherty | JJR |
| Phil Kazmierski | Mannik & Smith Group |
| Amy Torres | City Comm Development Department |
| Jon Dowling | City Engineering Department |
| Ed Rutkowski | City Engineering Department |
| John Guidinger | City Planning Commission |
| Cameron McCollum | Jackson Transit Authority |
| Oliver Lindsay | Jackson Transit Authority |
| Michael W. Franke | Amtrak |
| K. Michael Bedore | MDOT-Rail Passenger |
| Time Hoeffner | MDOT-Policy |
| Debi Weid | Jackson DDA |
| Kristin Hendricks | Walkable Communities Task Force |
| Charles Ahronheim | Historic District Commission |
| Steve Duke | R2PC |
| David Randels | Senator Mark Schauer's Office |
| Paul Egnatuk | Congressman Joe Schwarz's Office |



Site Plan - Concept 1

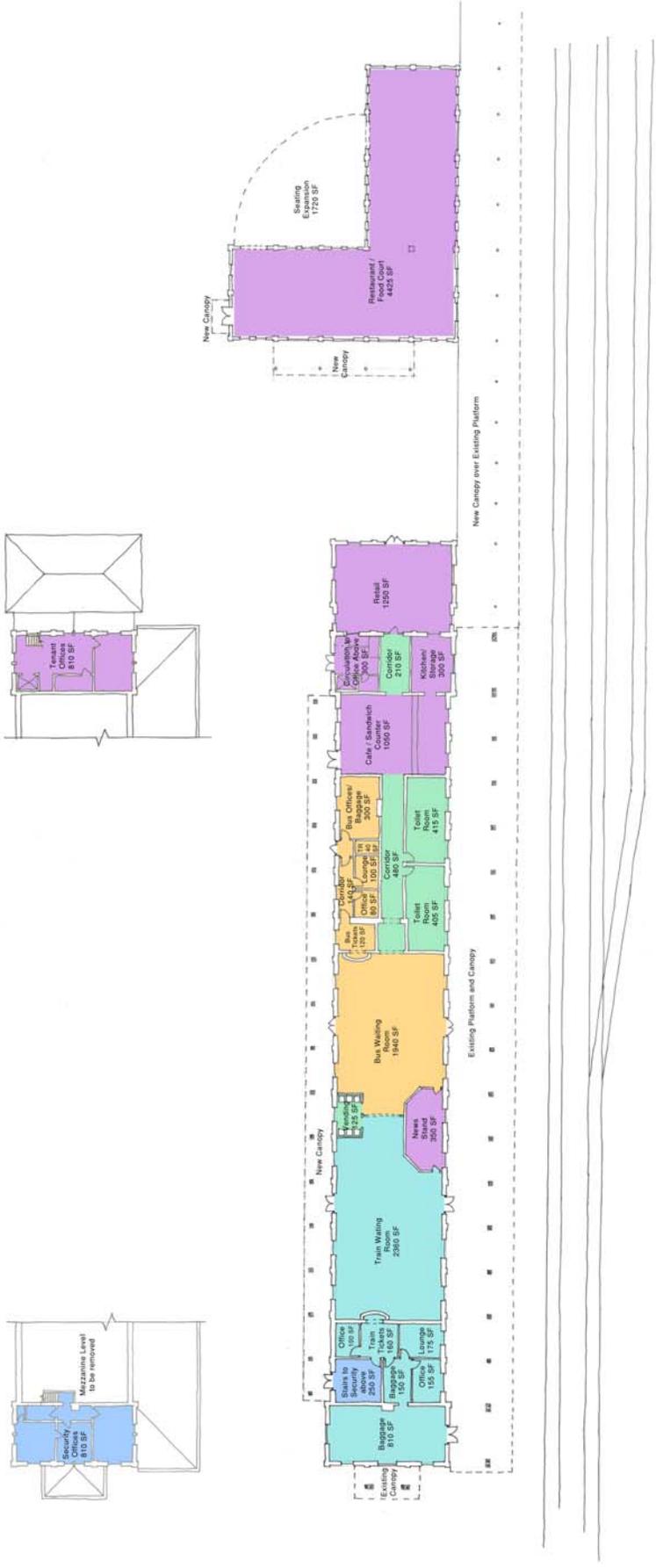
September 19, 2005

SMITHGROUP

Jackson Amtrak Depot Intermodal Study

City of Jackson, Michigan





Floor Plan - Concept 1

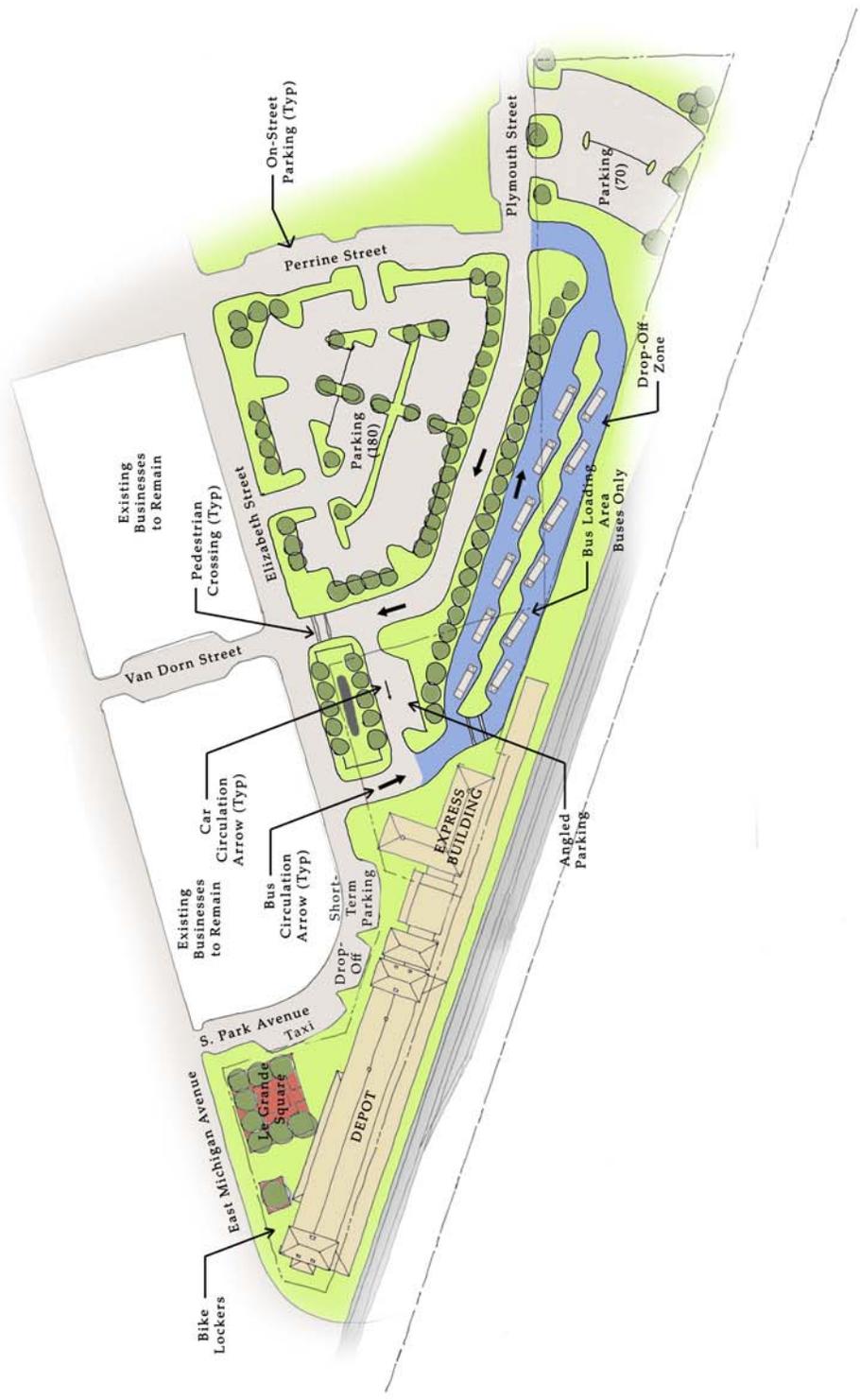
Jackson Amtrak Depot Intermodal Study

City of Jackson, Michigan

September 19, 2005

SMITHGROUP





Site Plan - Concept 2

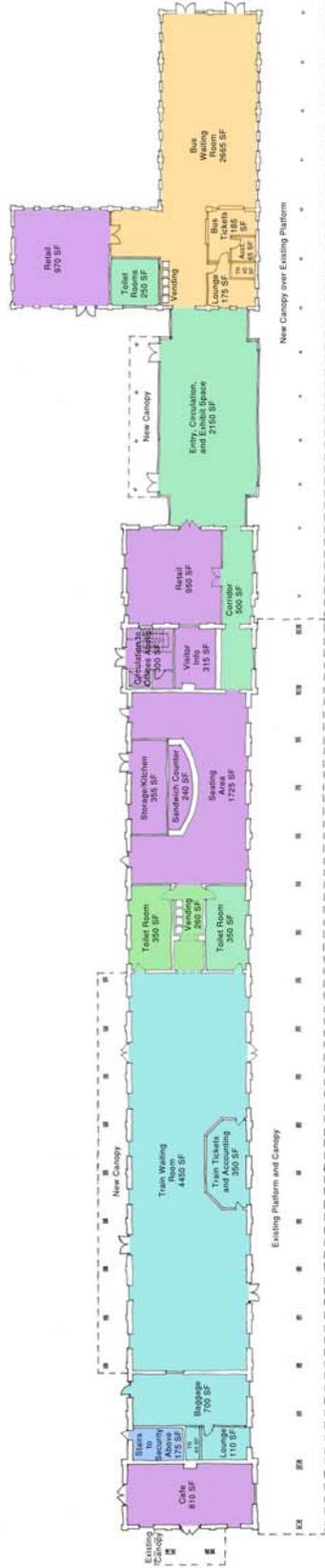
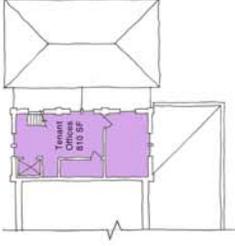
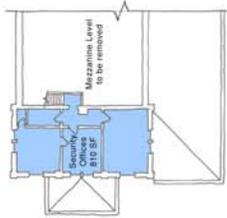
September 19, 2005

SMITHGROUP

Jackson Amtrak Depot Intermodal Study

City of Jackson, Michigan





- Train
- Bus
- Security / Police
- Tenant
- Support / Public



Floor Plan - Concept 2

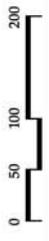
Jackson Amtrak Depot Intermodal Study

City of Jackson, Michigan

September 19, 2005

SMITHGROUP





Site Plan - Concept 3

September 19, 2005

SMITHGROUP

Jackson Amtrak Depot Intermodal Study

City of Jackson, Michigan



