

Downtown Revitalization

Project Report | Update 06.30.2013

Over the past several years, residents and business leaders have come together on different occasions to talk about and address issues facing our downtown. In 2010, JEDC engaged with some business leaders regarding concerns about crime. The Juneau Police took positive actions to increase foot patrols. Since late 2011, JEDC reconvened a group of Juneau citizens with concerns about the health and vitality of downtown Juneau several times to discuss their concerns and options available to revitalize the downtown area. JEDC facilitated these meetings, which were aimed at developing approaches to addressing identified issues. Smaller groups consisting of committed business owners, city representatives and citizens have collaborated to forward the work of the original group, defining a vision for downtown and identifying and researching three action initiatives surrounding core concerns.



PROBLEM STATEMENT

Increasingly fewer Juneau citizens consider downtown as a primary center for living, leisure and business.



VISION STATEMENT

Our vision is that Juneau borough residents will utilize the downtown area as THE primary year-round hub for living, leisure, government and business.

ACTION INITIATIVES



Increase
amount of
downtown
housing



Improve
downtown
streetscape



Develop
downtown
transit
circulator



Downtown Housing Initiative

Initiative Champion: Dave Hurley

Participants: Ben Lyman, Dale Pernula, James Bibb, Carlton Smith, Gerald Gotschall, Kurt Mattle, John McConnochie, Teresa Young, Bruce Abel, James Marcus, Jen LaRoe, Steve Soenksen, Steve Sorensen, Dan Austin

Initiative Objective: Increase the availability of downtown residences.

The Downtown Revitalization group concerned with increasing the stock of mixed use and residential options in downtown met over the course of many months, collecting studies, research and opinions in order to understand Juneau's current lack of such downtown opportunities and to share this information and make some suggestions about what can be done to increase the stock of mixed use and residential units in downtown.

Findings

Demographics

Living in walkable downtowns is an increasingly attractive option for young adults and for older citizens when the downtown provides such necessities as shopping, recreation and transportation. Many young people no longer want to own cars or homes.

Transportation

A downtown circulator will make living downtown a more viable option and is likely to encourage downtown commercial and residential development.

Streetscape

Street improvements and design standards, and public art will encourage investment in downtown construction. Improvements to building facades will make downtown more attractive. But more importantly, downtown must be accessible and safe for residents. This means that streets need to be snow and ice free and well lighted. Street maintenance and additional lighting should be provided by CBJ. For the Willoughby District, the SLAM project can be a kick-start for redevelopment, especially with improvements to Willoughby and Whittier streets and division of the super blocks by new streets.

Housing stock

There has been a significant loss of housing in downtown over the last decades. Demand for downtown housing is high, while vacancy rates for all types are effectively zero. There is a substantial market for downtown condos at \$300,000 or less. Downtown core buildings are often 80-100 years old; many are vacant or underutilized; their renovation may be financially viable without assistance. The downtown has a high vacancy rate in office space but little class A office space is available. Vacant office space, especially in upper stories, can be converted into residences.

Financing

Local banks finance approximately 90% of commercial and residential construction in Juneau. High appraisals for buildings in South Franklin distort the value of other downtown properties. AHFC and AIDA are interested in mixed use financing. Local banks are also interested in mixed use financing if projects are financially viable. A problem in Juneau is that construction costs are sometimes higher than appraisals. In the past, CBJ has used financing tools to bring down the cost of private development both for single family and apartment construction.

Other

- CBJ's changes to allow for greater residential density and lower parking requirements have already stimulated interest among developers. However, the market still wants more parking than the code now requires.
- There is a lack of concerted marketing of either the downtown core or the Willoughby District.

Possible Solutions

The following suggestions have been compiled by the Downtown Housing group as potential steps toward the goals of the group. Many of the actions would require cooperation from the City & Borough of Juneau (CBJ) .

- Break up the super blocks in the Willoughby District and street improvements along Willoughby and Whittier, as well as CBJ working with DOTPF to provide another entrance/exit to Egan Expressway from the Willoughby District.
- Market downtown Juneau more effectively, especially the Willoughby District, to potential investors.
- Designate the South Franklin tourist area as a special area for assessment purposes so as not to impact assessments in the rest of downtown.
- Reinstitute previous financing tools to encourage downtown residential development, including a funding pool for pre development costs and low interest loans for asbestos abatement prior to residential conversions.
- Increase the capitalization of the Affordable Housing Trust Fund to support larger projects.
- Since façade changes do not increase income but raise property taxes, tax incentives (loans with very low interest rates or property tax holidays of 5 years with increases over next 5 years) can spur reinvestment in aging properties.
- Residents to consider forming Limited Liability partnerships to develop residences in downtown.
- Review building codes to foster conversion of vacant office spaces and reach out to owners of properties with unused upper stories with information about conversion to residences.
- Downtown businesses to organize a Business Improvement District as a means of stimulating downtown development.
- Explore establishing a Downtown Redevelopment Authority that can use tax incentives to finance new downtown residential and mixed-use construction.
- Small developers to consider partnering with management companies in order to avoid apartment building management responsibilities.

- Work with federal GSA to develop one or more parking structures for federal employees and other renters (state and local residents, developers).
- Invest in a small parking structure for Willoughby District residents to encourage more residential development.
- Explore opportunities for using private purpose bonds for neighborhood revitalization.
- Realign Community Development staff so that developers deal with only one planner who is helpful and solution-focused.
- Develop design standards for voluntary use by Willoughby District developers.
- Facilitate meetings between CBJ, property owners and potential developers to review the Willoughby District Plan and especially Chapter 7's financing options.
- Condemn blighted buildings and offer low interest loans financed by public bonds to attract new businesses.

Case Studies

The Downtown Revitalization Housing group interviewed several downtown property owners and developers with a view to learning their perspectives on obstacles to using their property in ways that would increase mixed uses and residential uses in downtown.

Case study from a Willoughby District property owner

The owner's goal for this property is a complete retrofit of the building to make it an income source and a positive part of the neighborhood. The owner has a mortgage on a property he describes as "blighted" with a prior commercial use at ground floor and prior residences on the second story. The commercial renter found an alternative location, but a new commercial user has signed a lease. The vacant residences have been unused since CBJ forced eviction of tenants due to inadequate egress. In addition, it was not possible to "buy out" the old zoning requirement for parking and remain economically feasible. The owner was glad that the new zoning code reduced parking requirements. The owner would like to improve the façade of the building but this will be costly and not improve his competitive rental position while increasing his property tax burden.

Without some flexibility in code requirements, it may not be economically reasonable to restore residences on the vacant second floor where two or three apartments are possible.

Recently, the owner has made some investment in the property to meet the needs of the new lessee. When asked why this decision was made at this time, the owner said that the "kickoff" was the possibility that Foodland might close and the development of the SLAM project, both of which made his property more attractive to potential tenants. Another reason was CBJ Community Development staff who was helpful instead of adversarial.

This property owner believes that more residences would be built in the Willoughby District if the "super blocks" were broken up and if a parking structure for residents was built. He also felt that tax incentives would be a positive enticement to spur reinvestment in aging properties. He believes the best approach would be a 5-year minimum or some increases over each of several years to make a project pencil out. He suggested a waiver for the first 5 years with a graduated increase from zero to assessed rate in years 6 -10.

Currently owners who consider improvements that enhance the look of a property risk increasing their property taxes while spending money that will not increase income to the property owners. Also, with aging buildings, it

can be very difficult to make a positive return on your investment when bringing the structure up to code and remodeling. Interest rates, increased property taxes plus permit and inspection fees can easily be the difference between making a reasonable return on remodeling one of these older structures and taking a loss on the improvement. Thus these buildings have continued to deteriorate.

Current public investment in the Willoughby District changes the market. Thus, if CBJ were to delineate on a map what future infrastructure might look like and provide a style guide for the district, investors might be encouraged. In a 2-5 year timeframe, an improved streetscape (Whittier and Willoughby street improvements) would be a key change that the private sector would react to. If CBJ had a loan fund with very low loan terms or property tax forgiveness for façade changes, he and others would use that to improve the look of the area and this would increase investor interest.

Case study from a senior official of a Front Street business

This business has owned the building for more than 80 years. The street level is occupied, but the upper stories have been vacant for more than 40 years. Only 15% of the building is occupied. Several years ago they looked at renovation for apartments but it was cost prohibitive, especially since asbestos abatement may be required and the building code has changed since the floors were last occupied. Although there are no parking requirements in the historic district where the building is located, property appraisals take parking availability into consideration in determining property value, impacting projections of expected rents.

The Anchorage owner has considered several options for the building including looking for grants, donation of the building in exchange for permanent occupancy of the current commercial space and condominizing the building (separate ownership for each floor). A Limited Liability partnership for tax credits is something to explore. Basically, the owner does not want to be a developer or to incur any financial risk.

The downtown core faces the problem of many buildings at the end of their useful lives and the life of the materials. But these buildings are not worth what owners want for them due to the high cost of renovation. In new construction costs are often higher than appraisals, limiting the numbers of potential buyers to those who can fill in the money gap.

Case study from a builder/developer with downtown housing experience

Contrary to popular opinion, there are many places in downtown where housing can be built. Development cost can be reduced by use of modularity in multi story buildings. Builders could also acquire air rights for construction. He is glad that the high hazard zone permit, which cost \$10,000, has been removed. If a property is labeled as "high hazard" it is impossible to get insurance and, therefore, impossible to get financing for construction. However, some areas that are currently labeled "high hazard" are actually moderate hazard areas that could be developed with appropriate engineering. One action CBJ could take would be to establish a low cost loan fund or grant program for pre-development work that banks don't finance, such as geological and soils analysis.

Case study from a lawyer/investor with experience in affordable housing

Lots of condominiums were built in Juneau the 1980s. Townhouses or apartments are the best use of land and infrastructure is less costly than single-family houses, but private developers are not doing it. There are local investment options that can be used to finance housing, including limited liability partnerships; however, generally investors are not interested in the administration or maintenance of buildings and will shy away from these projects unless they can find an alternative, such as St. Vincent, to provide these services. CBJ's gap financing in the Affordable Housing Trust Fund is very limited. Neighborhood rehabilitation bonds have been



used by municipalities to rebuild and revitalize blighted area. Local governments can use eminent domain powers to condemn blighted property and can offer low interest rate loans financed by bonds to attract new businesses to blighted areas. If revenue bonds are used, projects need a rate of return for bond repayment. Tax credits for non-market rate housing are designed for nonprofit organizations that are set up to handle the heavy IRS/HUD paperwork that adds 13-15% to management costs for report.

Land trusts, where land remains owned by the trust which leases land to building owners, brings down the cost of housing and can be considered by CBJ as an alternative to land disposal for housing. Only \$3 million in tax credits are available to Alaska each year. Perhaps a CBJ pool of money with adequate capitalization and attractive financing terms, without the high compliance costs of federal programs, might result in more affordable housing, as was done by CBJ for Orca Point when CBJ got \$1 million from HUD and payments were through banks to CBJ. Clear rules for profit allocation would be needed, if this approach were combined with private investment.

Multifamily housing has pre development work of engineers and architects. These costs are upfront and may not come back to the developer. AHFC used to have a \$25,000 grant for preliminary studies, as did a Seattle financial institution. Neither has such a program any longer, but CBJ could consider one. If the project did not work out, CBJ could own the study results. If the project goes ahead, it could be a low cost loan.

Consideration could be given to addressing the AHFC board of governors and legislators to give back to AHFC some of the unrestricted revenue that now goes into the general fund to use for affordable and other housing projects. Without these funds, AHFC relies solely on HUD and its more limited mission.

A small-scale investment opportunity downtown is the renovation of upper stories of buildings for residential purposes. Buildings could be condominized, which would entail a condo association and maintenance fees beyond the purchase price.

Next Step

Submit Housing Report to CBJ Assembly



Streetscape Initiative

Initiative Champion: James Bibb

Participants: Jill Ramiel, Evelyn Rouso, Ke Mell, Chris Mertl, James Marcus

Initiative Objective: Recommend elements of a better built environment using the strengths and weaknesses identified in walks in downtown and Willoughby District that encourage a more livable and walkable downtown with public art and public spaces that reflect the history and cultures of the community. The effort will focus on the commercial and tourist arrival areas of downtown.

Members of the Streetscape group volunteered to address issues related to the safety and appearance of the downtown area. Members conducted their work through “walks” in different areas of the downtown and through discussions with city officials, members of the downtown community and others interested in the future of downtown. The group also conducted research and spoke with experts such as Patrick Quinton, Executive Director of the Portland Development Commission, and Brett Estes, Director of Planning for the City of Astoria.

Downtown Commercial Area - Findings

Safety

Many pedestrians feel our downtown streets are not as safe as they could be. Many of these concerns can be solved by minimal changes to the built environment, which can yield major impacts on pedestrian safety, especially in winter.

Potential Solutions

- Put in more street lighting in areas too dark for evening pedestrians to feel safe.
- Assure snow removal from sidewalks for morning workers and evening pedestrians.
- Require by ordinance that closed retail establishments have window displays and light their windows in the winter. One suggestion is that closed businesses collaborate with local artists to create lighted window displays.
- Install more doggie bag dispensers.
- Improve public ashtrays and consider public designated smoking areas to avoid the problem of too many smokers in front of businesses blocking pedestrian traffic.

Vacant Structures

Group members and members of the public are especially concerned about the numbers of vacant and under used structures in the downtown area. Fully utilized buildings mean more people in the streets, better ambient lighting and less of a “ghost town” feeling to our streets.

Potential Solutions

- Consider condemnation proceedings against buildings closed and neglected and presenting a fire or other hazard. Alternatively, consider a special assessment on such properties to account for the extra surveillance such structures require.
- Consider property tax rates based on higher uses for buildings currently fully or partially vacant to encourage full use of existing buildings.
- Ask CBJ to hold sessions for property owners about changes to CBJ building codes that allow for greater density and lessened parking requirements. Similarly, ask CBJ officials to meet with property owners to discuss conversion of upper story vacant offices to residential uses.

Aesthetic and Cultural Values

Residents' and visitors' downtown experience can be greatly enhanced by attention to the built environment and the aesthetic and cultural values implicit in the environment. Public investment in upgrading the built environment pays off in private investments.

Potential Solutions

- Establish a Façade Improvement Program to reward and encourage streetscape improvements. Attachment indicates ways in which to structure such a program in which CBJ, DBA, planner and architect associations participate in a multi group effort to either recognize with monetary prizes to downtown commercial area businesses which upgrade facades in accordance with certain design criteria or to provide grants to businesses which participate in such a program. A specific study of streetscapes with "before and after" drawings will help to achieve the goals of a Façade program.
- Outside art work within the district should be encouraged via short term property tax reductions. Artwork should reflect the history of the community and its Native heritage and cultural diversity.
- Interpretive signage should be more readable and reflect the diverse history of Juneau.
- Encourage planting more street trees and improving landscaped and green spaces in downtown.

The Streetscape group engaged some downtown business owners in an exercise to check their recommendations with the perceptions of downtown business people. The process generally validated the group's recommendations but also generated several additional recommendations.

These downtown business people were especially concerned that many downtown properties are owned by either absentees or by owners who are not making current investments in their properties. They considered the way in which downtown property assessments reflect the value of South Franklin Street properties rather than local businesses geared to residents. In addition, they supported the following:

- Transfer of responsibility from DOT to CBJ for the downtown section of Egan Drive in order to create a more walkable community.
- Set up Business Improvement District for the downtown commercial core.
- Provide more open space in the downtown area.

Willoughby District – Findings

The Streetscape group conducted two walks in the Willoughby District with group members, city officials, property owners and representatives of Tlingit Haida Regional Housing Authority and the press. Group members familiarized themselves with the CBJ Willoughby District Plan and compared the current built environment with the Plan's vision for the future. In general, the group sees great potential for the Willoughby District to contribute to the revitalization of downtown and to add to downtown's housing stock. Construction of the new SLAM building can be a catalyst for private investment in the district. The group supported addition of a transit circulator and other improvements (for example, a 24 hour elevator or similar system) to link the Willoughby District with the Capitol and the downtown business core.

Design Standards

Proactive adoption by CBJ of design standards will not only improve pedestrian safety and comfort but will also assist private developers by specifying some of the architectural details for new construction and remodeling.

Potential Solution

- Using the success of Seward and Main Streets, adopt design standards for public spaces and new construction to assure, for example, higher quality materials, wider sidewalks, and canopies.

Traffic and Pedestrian Experience

Group members supported the way in which the Willoughby District Plan envisioned a more walkable area in which residential density zoning could increase mixed-use development in the District. Fewer large areas devoted solely to parking will also make the winter and nighttime experience safer for pedestrians and residents. But it is necessary to ensure that automobile traffic moves through the area, especially when state employees leave their offices. This can be accomplished through more coordination between CBJ and DOTPF to provide for wider sidewalks, more pedestrian crossings, including to the Seawalk, and an additional access point for cars to Egan Drive. Design should include landscaping and trees.

Potential Solutions

- Work with DOTPF to provide another access entry to Egan Drive from the Willoughby District and to treat the area from Gold Creek Bridge to Centennial Hall in the same way as the roadway from Main Street to the Tramway, allowing for development of the Foodland property, wider sidewalks, trees, bike lanes and more crossing points.
- Improve traffic and the pedestrian experience by negotiating with the State and Foodland owners to have a new street from the back of the SLAM to Egan with a pedestrian crossing there.
- Nominate Whittier Street for DOTPF redevelopment, similar in design to Seward Street.
- Encourage a central heating district in the Willoughby District and to use some of the heat for heating of public spaces and sidewalks.
- As suggested in the Willoughby District Plan, support area wide parking solutions, for example, a Federal Building parking structure that would also accommodate state vehicles and parking for local businesses and residents.
- Promote relevant recommendations of the CBJ Willoughby District Plan.

Next Step

Synthesize Façade program research to develop a program for downtown Juneau.

Facade Program Research

Facade Program Research

City	Eligible Work	Funding Mechanism	Design Assistance	Reviewing Body	Application Cycle	How Funds are Awarded	How Funds Dispersed	Required Project Completion Timeline	Additional Information
Monmouth, OR	Façade, Awnings, Lighting, Signs, Landscaping, Accessibility Upgrades, Benches	50% matching grant, \$5,000 max	Funding available through separate application	Urban Renewal Agency Review Board	None, one grant per building per 12-month period	First come, first served	Upon project completion	12 months	
PDC (Portland Development Commission)	Façade	50% matching grant up to \$20,000	Up to 30 hours free or Up to \$1,500 reimbursed	PDC	None, building allowed maximum grant amount in a 5 year period	First come, first served	Upon project completion	Information not available	Competitive bids required. Improvements funded by grant are required to be maintained for 5 years
Tillamook, OR	Façade, Signs, Sidewalks, Landscaping	Loan up to \$5,000	None	City Manager and Staff	None	First come, first served	Upon project completion	Information not available	
Adrian, MI	Façade, Sign, Paint	50% matching grant up to \$1,500. Loan up to \$10,000	None	Design Committee and DDA	Annual	First come, first served	Information not available	Information not available	
Denton, TX	Façade, Sign, Paint	50% matching grant up to \$500	None	Downtown Development	Annual	First come, first served	Upon project completion	Information not available	Competitive bids required
Ferguson, MO	Façade	50% matching grant, \$2,500 min and \$25,000 max	Up to 10% of grant amount	City Council	Based on fiscal year	First come, first served	Upon project completion	Information not available	Façade easement to ensure retention of work. Competitive bids required.
Georgetown, TX	Façade and Sign	50% matching grant up to \$10,000. Paint only up to \$5,000. Sign grant up to \$500.	None	Historic and Architectural Review Commission	None	First come, first served	Upon project completion	12 months	Offer a "paint only" grant

Facade Program Research (cont.)

Facade Program Research

City	Eligible Work	Funding Mechanism	Design Assistance	Reviewing Body	Application Cycle	How Funds are Awarded	How Funds Dispersed	Required Project Completion Timeline	Additional Information
Albany, OR	Façade	50% matching grant, \$5,000 max	None	Information not available	Information not available	Competitive	Information not available	Information not available	
Canby, OR	Façade, Signs, Awnings	50% matching grant for design assistance. 0% interest loans up to \$75,000	50% matching grant	Project Team	Annual	5 design grants per year. First come, first served.	Three installments	Information not available	Grant and Loan Program Combined
Coos Bay, OR	Façade, Awnings, Lighting, Painting	50% matching grant, \$1,000 min and \$25,000 max	10% of project cost up to \$5,000	Urban Renewal Agency	None, one grant per site per fiscal year	First come, first served	Upon project completion	6 months with a possible additional 6 month extension	Competitive bids required
Corvallis, OR	Façade, Awnings, Lighting	50% matching loan up to \$6,000	None	Design Review Committee	None, one grant per building per 12-month period	First come, first served	15 days after project approval and submittal of invoices	6 months	
Dallas, OR	Façade, Signs, Awnings, Paint	Up to \$20,000 loan	None	Commercial Retention and Recruitment Team	None, one grant per building per 12-month period	First come, first served	Upon project completion	6 months	
Gresham, OR	Façade	50% matching grant \$5,000 min and \$20,000 max	Up to 30 hours free or up to \$1,500 reimbursed	Gresham Redevelopment Commission	None, each building allowed maximum grant amount for a 5 year period	First come, first served	Upon project completion	Information not available	Competitive bids required. Require improvements funded by grant to be maintained for 5 years.
Klamath Falls, OR	Façade	50% matching grant up to \$20,000	100% reimbursement up to \$400	Downtown Urban Renewal Advisory Committee	None	First come, first served	Upon project completion	365 days	Separate historic sign restoration grant

Facade Program Research

City	Eligible Work	Funding Mechanism	Design Assistance	Reviewing Body	Application Cycle	How Funds are Awarded	How Funds Dispersed	Required Project Completion Timeline	Additional Information
Greensburg, IN	Façade, Sign, Paint, Lighting	50% matching grant up to \$5,000	100% up to \$500	Design Review Board	Semiannual	First come, first served	Upon project completion	6 months	
Greenville, NC	Façade, Signs, Awnings	50% matching grant, \$5,000 min to \$10,000 max	None	Design Review Committee/Historic Preservation Commission	Based on fiscal year	First come, first served	Upon project completion	9 months	Competitive bids required
Howell, MI	Façade, Paint	50% matching grant \$10,000 max for front, \$5,000 max for rear, \$2,000 max for side	50% matching grant up to \$2,500	Downtown Development Authority	Three application cycles per year	Proposals judged on scoring system	Upon project completion	12 months	Award grants for front, rear and side façade work
Monroe, MI	Façade	Rebate up to \$10,000	Up to 3 hours free provided through program	Façade Grant Committee	Annual	Proposals judged on established criteria	Upon project completion	12 months	Front and rear facades eligible for grants
South Orange, NJ	Façade, Signs, Awnings, Paint	50% matching grant up to \$2,000	Grant funds may be used to cover fees	Main Street Design Committee	None	Proposals judged on established criteria	Upon project completion	Information not available	
Sumter, SC	Façade	35% matching grant, \$500 - \$2500. 30% matching grant, \$2501 - \$5000. 25% matching grant, \$5001 - \$10,000	None	Review Committee	Annual	Based on scoring system	Dispersed to contractor based on project scope	90 days	Grants can be used for front, rear and side façades. Competitive bids required.
Tecumseh, MI	Façade, Paint	50% matching grant up to \$5,000	None	Downtown Development Authority and Design Review Committee	Semiannual	Proposals judged on established criteria	Upon project completion	12 months	Separate sign program

Transit Initiative



Initiative Champion: Greg Fisk

Participants: Fran Downey, Heather Marlow, John Kern, Mark Ridgeway, Nancy Waterman, Paul Thomas, Ben Lyman, James Marcus

Initiative Objective: Improve downtown district interconnection, encourage a better tourist and pedestrian transit experience and encourage downtown transit-oriented housing development by providing an alternative to private vehicles.

What Is Transit Oriented Development and What Are Its Benefits?

Transit Oriented Development (TOD) is characterized by higher-density mixed-use development built in conjunction with quality public transportation. TOD is about creating attractive, walkable, sustainable communities. The development spurred by “fixed guideway” transit is generally considered to boost private investment within a half mile of the transit route:

- Providing a rich mix of housing, work, shopping and transportation choices.
- Generating greater private sector revenues and property values.
- Growing the public tax base; enriching the experience of both new and existing residents.
- Creating a much-enhanced sense of place.

TOD is distinguished by public investment in permanent transit infrastructure. Studies and experience indicate that private development investment does not follow conventional bus routes to the extent as with permanent, fixed guideway transit.

What is Fixed Guideway Transit?

“Fixed guideway” means a transit system with vehicles that are not able to operate on the regular roadway system. This includes tracked systems such as streetcars and electric buses operated by overhead wire systems or by overhead charging stations.

A Brief History of Downtown Circulators

Juneau had a downtown circulator bus starting in late 1984. The project ceased after three years when federal funding expired. For more on this, see the 2008 Capital Transit Development Plan (TDP), by Moore & Associates, at <http://www.juneau.org/capitaltransit/pdfs/adopted2.pdf>. An entire section of that plan, titled “Downtown Shuttle Feasibility Study”, begins on page 169. Another reference is the related 2009 work by the Downtown Business Association (DBA) titled “Downtown Circulator Shuttle Feasibility Study” also done by Moore & Associates. Both focus solely on bus based systems and cite three principal goals, to:

- "Improve community mobility"
- "Promote downtown as a commercial and retail destination"
- "Mitigate downtown traffic congestion for residents, persons employed in the downtown area, and visitors to Juneau"

A possible side effect of "...reduce(d) reliance on personal vehicles in the downtown area" was also noted.

The Moore study focused mainly on local passenger transport and linking with Capital Transit lines. It did not focus on area economic development or on transport of visitors.

We would expand and emphasize the second goal, and advance the idea that *the fundamental purpose of a downtown circulator should be to foster and shape robust economic development in downtown based on Transit Oriented Development principles*. This approach emphasizes different, more comprehensive goals than those advanced in the Moore studies:

- The Downtown Circulator will be a major driver of overall economic development / redevelopment in downtown Juneau.
- It will serve visitor traffic, and downtown area residents, and Juneau residents who commute to the downtown area for work, shopping and entertainment.
- It will establish enhanced linkages between key existing and planned visitor, work, entertainment and residential venues.
- The Circulator will be a "pedestrian extender". It will not compete with pedestrian oriented projects like the Seawalk, but rather will be an integral part of a comprehensive downtown transportation system including pedestrian, public transit and conventional modes.

Despite these differences it is important to note the many positive findings of the Moore studies. Moore stressed that a sustainable and effective system needs a distinct "branding" that distinguishes itself from regular CBJ Capital Transit buses for marketing purposes. Moore also demonstrated the importance of short headways. That principle of high frequency service, 15 minute intervals or less, is vital for the success of any circulator system.

System Alternatives

There are two basic alternatives for circulators: bus-based systems and true-railed streetcars. Within each type are several possible variants.

Bus systems range from conventional diesel buses, to electric "trolley" buses, to new super-capacitor drive vehicles.

- **Conventional buses** do not meet the fixed guideway criterion that Downtown Revitalization proponents think is essential for development stimulation. Nonetheless, some research has been done on the idea of using vintage / restored buses that would strike a nostalgic note, perhaps offer more rider appeal, and be more susceptible to system branding. This approach has some difficulties, such as vehicle

reliability, ride quality, EPA engine compliance, and ADA compliance. Also, there does not seem to be a very good inventory of potentially attractive, restorable vehicles to draw from.

- Overhead wire **electric trolley buses** are available, but incur the major system cost of catenary wire installation – typically in excess of \$1 million per route mile – while not offering the other attractions of electric streetcars.
- **Electric and hybrid electric buses** have been in service in dozens of US cities since the mid 2000s and met goals of noise and air pollution reduction while operating efficiently and cost effectively. Several companies make these new buses, usually 22' long and ADA compliant. They operate without the usual bus noise and, in the electric mode, have no emissions.
- Ultra-modern **super capacitor drive buses** eliminate the wire system in favor of quick electric battery charge stations, and certainly have a “gee whiz” factor that makes them technologically quite interesting. They are clean and ADA compliant. Their use could significantly improve downtown air quality.

Since the mid 2000s, American and Canadian national and state or provincial governments have made concerted efforts to adopt proven alternative fuels to replace diesel buses for the sake of clean air, noise reduction, sustainability and cost savings. A number of companies have pioneered different technologies to achieve these goals, including ProTerra, New Flyer, and EV America. Data has been collected since about 2005 and can be found referenced at the websites of the American Public Transit Association (www.apta.com) and the Canadian Urban Transit Association (CUTA).

Countries around the world, in Asia, Europe and South America have converted to the use of electric buses. There is a great variety in size, battery capacity, and battery type, all of which impact the cost of the electric bus. But, in general, most authorities say that over the 12 year life of a diesel and electric bus, the costs are the same, around \$700,000. One, the diesel bus, has lower capital cost but higher fuel and maintenance costs while the other, electric buses, has higher capital costs but lower operating and maintenance costs.

Dozens of cities have adopted hybrid electric diesel buses and found them to meet their needs. Many of these cities, such as Madison, Wisconsin, Ann Arbor, Michigan operate in cold climates. Starting in 2007, San Francisco has acquired 86 hybrid electric buses, 512 bio diesel buses and a smaller number of experimental fuel cell buses. San Francisco also placed filters on all diesel buses. The city is currently experimenting with compound fuel cell hybrids, eBus and Proterra buses which charge en route.

EV America produces a 22' electric bus that runs 70-90 miles per charge and another 22' bus which charges in transit when discharging and picking up passengers. Other buses, such as the electric circulator bus in Ojai, California are shorter still and still able to accommodate wheelchairs.

If rail system proponents are right, while bus systems move people well and can operate without emissions, they do not have the same economic development potential of rail systems.

Streetcars fall into three basic categories –fully modern, new replica systems, and restored. In all cases the track system is basically the same. Since a Juneau system would be new, it would benefit from the latest in track technology and “low cost model” construction techniques, which allow for shallow bed excavation (18” to as little as 12”).

- **Fully modern systems** like the Seattle / Lake Union Streetcar and much of the Portland system offer benefits in terms of accessibility, passenger capacity, ride quality, etc. However, the vehicles are expensive at \$3 to \$4 million per car. They are also large – typically 60'+ in overall length. Since they are articulated they could make even the tightest turns in Juneau. But, their length could cause stop problems and general congestion in the older part of downtown.
- **Restored vehicles** can vary widely in price depending on initial condition. Some of the most interesting – the President's Conference Committee (PCC) cars – would be stylistically very good fits for a historic feeling system in Juneau and still offer very good ride quality, reliability, etc. However, almost all available PCC's are single-end. They thus require turn-around loops, and cannot be adapted to single-tracked systems. That means that one significant possible cost saving design feature would be unavailable to us.
- **New replica cars**, such as those used in Little Rock and Tampa, offer the benefits of new construction, modern controls, etc. but in shorter, non-articulated, and much less expensive cars. Gomaco's replica Birney cars are in the range of \$1 to \$1.2 million each, depending on the precise specifications. They also have the appearance that many people associate with traditional streetcars.
- Savannah, Georgia operates a restored, upgraded 1920's Melbourne car with an advanced super capacitor drive system and controls. The new advanced systems added about \$100,000 to the overall cost of fully restoring the car.

Of the two basic options – a bus-based circulator or a true streetcar – the latter seems the preferable alternative, depending on the availability of funding and potential development impacts. If a streetcar is deemed unfeasible, a fixed guideway super capacitor bus system, properly branded, could either be the first phase of system development or a less costly choice. In any event, electric buses, able to run between 70-90 miles per charge are more than adequate for Juneau's downtown circulator needs.

Recommended Routes

To maximize the development impact of transit, we recommend the following route, recognizing that some modification may make for less costly system development. Except for the "uptown" section the route generally parallels the Seawalk at a reasonable walking distance and complementing access to the Seawalk, and to current and proposed parking structures.

Core System

Starting at the Franklin Dock and proceeding along Franklin Street to 4th Street; left along 4th to Main Street; left down Main Street to the Transit Center; thence along Willoughby Avenue and Old Glacier Highway to the Federal Building.

This basic routing connects key points throughout downtown – three of the cruise ship docks the historic downtown, the Legislature, courthouse and State office buildings, major residential buildings, parking structures, all principal downtown shopping venues, and the Federal Building.

If a streetcar system is selected, minimizing double tracking will be an important cost savings. For this reason, a route which goes up Franklin to 4th, down Main and to the Federal Building (or beyond) and then returns via Main and down Seward Street to Ferry Way and then to Franklin seems likely to achieve this goal.

Possible Variants and System Extensions

Several ideas have already been advanced, including:

- Extension to the “rock dump” area. This would result in all of the cruise ship docks having service and would bring additional development stimulus to the entire ‘rock dump’ area.
- Extension beyond the Federal Building to create a “return loop” that crosses 12th Street then loops back via F and 10th Streets to head back toward the Willoughby District and downtown. This improves access to the system for the school campuses, important senior housing, the harbors, government buildings near the Douglas Island Bridge, and the eventual Seawalk terminus while enhancing the development potential of the several block area near the Egan Drive / 10th Street intersection.
- Running the line through the “super blocks” in the Willoughby District either as an alternative or addition to the Willoughby Avenue alignment. This concept could offer considerable access benefit and amenity to developments like the SLAM, the proposed Performing Arts Center, and to private developments in the area.

Expected Users

A downtown circulator’s anticipated users will be downtown residents, other Juneau residents who commute to downtown for work, and local people who use it to access cultural and other services. Visitors will, of course, be encouraged to use the circulator to bring them to areas which they might not otherwise visit and to access areas safely and enjoyably in inclement weather. For example, visitors might walk the length of the Sea Walk and then return to the core of downtown via the circulator. The circulator makes perimeter parking structures a much more attractive option for downtown workers.

Connection to the Visitor Industry

A circulator streetcar will be an attraction in itself both for local residents and for visitors. Streetcar systems like San Francisco’s “F” Line and Cable Cars are enormous visitor draws and positively define the city for potential visitors. They are great city marketing tools. Obviously, not every streetcar system has San Francisco’s cache, but they have achieved iconic status in many cities – Tampa, New Orleans, Portland, Little Rock, and Seattle. Streetcar systems even attract a dedicated group of devotees - aka “Trolley Jollies” – which travels to cities specifically for the purpose of riding the streetcars. A streetcar in Juneau can expect to be a major marketing item for the cruise industry.

It is doubtful that a bus-based system – even very well branded – could achieve the same status. To the best of our knowledge only London’s solid red, double-deckers have gained “iconic” status. However, if innovative enough, a bus system might achieve notoriety beyond the mere utilitarian, especially the “high tech” electric models, if properly branded.

A “city pass” that included transit and admission to, for example, the City Museum or other venue, could be offered for sale by the cruise companies, providing them with a marketable item and a share of the pass revenues. Such passes are common in many major visitor cities. Princess Cruises already features a streetcar system in one of its European cruise destinations.

There are currently two companies that offer tours in the downtown area aboard diesel powered “faux” trolleys. The downtown circulator should seek minimize impact on these businesses by specifically not offering on-going commentary or information.

Various issues of concern have been raised respecting tourist use of a circulator system. One is the possibility that summer traffic might overwhelm the system, effectively preventing local people from using it. In the past, city buses on S. Franklin became so crowded that this was a problem. To some extent crowding would be a “problem of success”. Unlike the regular bus service, a circulator could easily increase service by additional vehicles, as they would be confined within the system, and would not have to be coordinated with long routes outside the downtown area. Shorter headways would help alleviate crowding.

Another concern centers around one of the goals of the transit system – its function as a “pedestrian extender”. If tourist access is extended well beyond the South Franklin Street area, it is possible that property values throughout the wider downtown could increase to such an extent that businesses focusing on local services might be forced out, negating the prime goal of the circulator which is transit oriented development. Conversely, might a circulator pull visitors away from the prime S. Franklin visitor retail area, thereby lowering property values there? These are valid questions, but it seems reasonable to expect that the overall effect would be to increase the utility of properties throughout a much larger service area and enhance retail possibilities to both visitor and resident populations.

CBJ has a goal of increasing housing for both local and seasonal workers. A circulator in the commercial core of downtown and in the Willoughby District should make housing development in those areas more attractive to investors. Increased population in the downtown will also support downtown businesses and leisure activities.

Costs

To provide the frequency of service needed in the proposed downtown circulator system at least 3 and probably 4 dedicated vehicles would be required. Two or three would be in operation, with one held in reserve. This is true of either buses or streetcars.

Type of Vehicle	Unit Cost	Total Cost (3 to 4 vehicles)
Conventional Bus	\$400,000 to \$500,000	\$1.2 to \$2.0 million
Electric or hybrid electric bus	Depends on size and battery type	About \$700,000 over 12 years
Super-Capacitor Bus	\$800,000 to \$1 million	\$2.4 to \$4.0 million
Replica Streetcar	\$1.0 to \$1.2 million	\$3.0 to \$4.8 million
Modern Streetcar	\$3.0 to \$4.0 million	\$9.0 to \$16.0 million

Any circulator system will need considerable upgrades to at least all *major* stops. In addition to weather protection, an essential part of any circulator system is a good information system that indicates the position of the cars in the system and the expected wait time to the arrival of the next car at each station. This has proven to be a very important component to the success of systems in attracting and keeping riders.

Capital Costs

Capital cost estimates include dedicated maintenance facilities, significantly upgraded stops, vehicles and electrical systems and, in the case of the streetcar, track bed and rail:

- True Streetcar \$30-\$45 million (\$10-\$15 million per track mile);
- A charging station in which electric buses can recharge is about \$50,000

- Super-Capacitor Buses roughly \$8 million

The streetcar estimates are based on advice from a noted expert in the field and assume adherence to what has been termed the “low cost design” approach, which focuses on functionality and avoids rolling many non-system costs into the project. Non-system costs that commonly add to the cost of rail systems include associated city planning amenities such as parks and major re-landscaping, and the often hugely expensive acquisition of right-of-way. The proposed system would operate entirely within existing CBJ right-of-way. The estimates are also based on the core system described earlier. Route extensions would add to the cost.

Whether a streetcar or an electric bus system is installed, a maintenance facility would be required. The AEL&P old steam power plant building on South Franklin Street has been mentioned as a location that could serve that purpose and connect the circulator to a piece of Juneau history. Use of similar historic structures as visitor destinations that also serve transit is common in cities around the world.

Operational Costs

The operational costs of either an electric bus or a streetcar system are similar, since the largest component of cost is personnel. Both are expected to be less costly than conventional diesel buses on energy, as the cost of electricity will remain relatively flat over time compared to the rising cost of diesel. Maintenance costs for streetcars are normally less than for diesel buses because drive systems are quite robust. We do not have long-term data on maintenance cost for super-capacitor buses. Streetcars should offer an advantage over electric or conventional buses in terms of equipment life. Streetcars may have an additional cost beyond regular street maintenance for track cleaning and upkeep, but this is typically a minor incremental cost.

System Financing

The CBJ has two sources of revenue derived from the cruise ship industry for which a circulator project would be eligible. There is also the State’s cruise ship “head tax”.

CBJ Funding Sources:

The CBJ assesses a Marine Passenger Fee (MPF), aka the “head tax”, and a Port Development Fee (PDF). The MPF is \$5.00 per passenger, while the PDF is \$2.18 per passenger. Both are currently “fully subscribed”. The PDF is all currently dedicated to the Cruise Ship Docks Reconfiguration Project (Concept 16B) through the end of FY15, after which it begins to show an available surplus. But most is still dedicated to revenue bond repayment on that project through FY23.

Using these two funding sources – singly or in combination - for a circulator project would require some re-ordering of priorities and Assembly approval. Some reprogramming can still accomplish other CBJ priorities. For instance, instead of funding Seawalk completion with lump sum cash amounts, it might be appropriate to combine Seawalk and circulator projects together and bond fund them as a joint pedestrian / transit project to be repaid over time with MPF and PDF revenues.

State Funding:

Another very important possible source of funds is the State’s Marine Passenger Fee (S-MPF). Under current arrangements, Juneau is to receive \$4.2 to \$4.8 million per year through FY15. Juneau received a \$10 million payment from this source last year. That money, plus \$18 million expected through FY14, is dedicated to the Concept 16B dock project. It is anticipated that CBJ/ Docks and Harbors intends to continue requests for those

appropriations in order to pay down any debt service on the 16B project, meaning that future PDF and possible additional S-MPF receipts would be unencumbered beyond that point.

The circulator project could follow the Dock Reconfiguration model, using funds from combined sources - CBJ's Port Development Fee (PDF) and the State Marine Passenger Fee (S-MPF). Together these amount to more than \$7 million per year. They are currently dedicated to paying for the Cruise Ship Dock Reconfiguration project. But that project should be completed by 2017 or 2018, after which no clearly identified major S-MPF eligible projects are "penciled in".

It should be emphasized that use of S-MPF funding in particular does not compete with any other CBJ project funding. After the Concept 16B dock project is completed, CBJ will cease to receive these funds unless we develop and implement a project that is eligible for their use. This circulator project is consistent with the funds' stated purposes and supports both the cruise industry and general economic development. It is interesting to note that just 8 to 10 years of S-MPF funding would be enough to pay the entire capital cost of a streetcar system.

Long-Term Development Impacts

Anticipated economic development spurred by TOD can increase property values and revenues to CBJ, as well as create substantial direct employment during construction and generate multiples of private investment in the downtown core and Willoughby districts.

The development impact of streetcars is potentially significant. As noted, regular buses are not as comparable. The investment multiples of Transit Oriented Development have been documented in the recent example of this is residential and commercial development that has taken place along the Sound Transit line from SeaTac to downtown Seattle. The area along Rainer Avenue / Martin Luther King Blvd. was very run down for decades, despite have regular conventional bus service. It has experienced remarkable – transformative - investment since the fixed guideway transit system became operational. The Portland example is very well known. Former "brownfields" have been transformed into vibrant, attractive neighborhoods. Along the downtown Portland streetcar system, private development investment is estimated to have exceeded the transit system cost by more than 2,000 percent.

In Juneau we cannot expect large multiples for a variety of reasons. However, based on other, smaller cities' experiences, we probably forecast development multiples of 2 or more times the investment in a streetcar system. There is not enough experience to forecast the multiples expected from a high tech electric bus system. TOD predicts associated investment in new private investment in housing, office, retail and other commercial development in close proximity to the line. It will also enhance the value of existing properties, thereby raising property tax revenues.

Of the two basic options – a bus-based circulator or a true streetcar – the latter seems the preferable alternative given the availability of funding and expected development impacts. If a streetcar is deemed unfeasible, a fixed guideway super capacitor bus system, properly branded, makes a suitable alternative.

Next Step

Submit Circulator Report to CBJ Transit plan process.