



February 11, 2019 FINAL

Project: CBJ DTC City Hall Addition Study

RE: Executive Summary, Concept and Construction Narrative

In the fall of 2018, NorthWind Architects and Raincoast Data were engaged by the City and Borough of Juneau to assist with assessing both the construction and financial feasibility of relocating City Hall and other CBJ administrative office functions to new construction on top of the parking garage constructed in 2009 as a part of the downtown Transportation Center. It is known the original garage structure was constructed to receive future upper level construction –either additional parking or office building levels. It was also known the gross area of space needed to house all City departments identified to be a part of this analysis is roughly two time the floor plate area of the Garage, leading to a two floor addition solution for analysis.

A precedence has been established in Juneau for constructing occupied space over structured parking by the construction of the Downtown Library on top of a waterfront parking structure. Strategic advantages are that by utilizing an existing developed site the City is not taking highly valuable land to develop a new facility, and most of the parking and access infrastructure has already been established. Further, “capping” a relatively open parking structure in this way affords a measure of weather protection and effectively extends the life of the parking garage. Disadvantages include retrofitting heavy concrete structures to provide for otherwise absent water and waste systems, and displacement of existing parking in a busy downtown core during construction.

The findings of the technical analysis confirmed the proposed project is technically possible and operationally favorable. The costs will be on a par with the cost of new construction of a similar facility on an undeveloped site, with a foreseeable savings over an extended period, as borne out by the cost analysis. The greatest single advantages is seen in upgrading the places of civic operations that are currently housed in declining building infrastructure, freeing up that currently occupied building space in the downtown area for the purpose of expanding other commercial and residential use, and keeping key municipal operations in the Juneau downtown core where there simply are no other reasonable building sites available.

NorthWind was the Architect of Record for the Garage project and was able to bring the project’s original structural engineer and design architects to the table for project analysis. Raincoast Data is a known and trusted consultant with a solid track record with the City conducting project economic analysis.

Sean M Boily AIA
Principal Architect

James Bibb AIA
Principal Architect

David Hurley AIA
Principal Architect

126 Seward Street
Juneau, AK 99801

p.907.586.6150
f.907.586.6181

Project Summary and Design Outline

New Consolidated City Services Connects to the street level via a new access tower between the present Garage and the existing Transit Center, and locates approximately 46,000 gross square feet of municipal offices and service space on two levels plus mechanical penthouse constructed above the current 4th floor of the parking garage. This project replaces approximately 50,000 gross square feet of space the City currently owns and/or leases. The facility will be highly visible, accessible and navigable to the public through both the garage levels and the street level entrance. There is a net loss of approximately 10 parking spaces. The proposed design will not affect street level, parking level or stair tower security.

General

- Level 1: Add new entry lobby, stair and elevator external and adjacent to existing garage footprint, SW corner.
- Level 4-7: Add stair tower extension, N stair.
- Level 5-6: Add new level 5 and 6 to accommodate approximately 43,600 SF of new Consolidated City Service program.
- Level 7: Add new level 7 mechanical penthouse.

Civil

- Level 1 Convert 30% of existing asphalt pavement parking to paver plaza, install new raised paver cross-walk connecting paved plaza to new level 1 main building entry.

Demolition

- Level 4 Remove existing concrete cornices

Structural

- Level 1-6 Construct (1) new concrete elevator shaft external and adjacent to existing garage footprint, SW corner, 900 gross square feet.
- Level 1-6 Construct new steel framed entry lobby and stair tower with steel pan deck roof enclosing new elevator shaft, external and adjacent to existing garage footprint, SW corner.
- Level 4-6 Extend all existing concrete shear walls vertically to level 6.
- Level 4-7 Construct (1) new steel framed stair tower extensions with steel framed/pan deck roofs, N stair.
- Level 5-6 Construct (2) new structural steel frame with steel pan-deck/concrete suspended slabs.
- Level 7 Construct (1) new structural steel frame w/ steel pan-deck roof mechanical penthouse, approximately 1,500 gross square feet.

(see Juneau City Hall Structural Narrative 8/27/18 for more information)

Architectural Exterior

- Level 1-6 Cladding, lobby and stair tower: Kawneer 1600 to match existing.
- Level 4-7 Cladding, stair tower extension: Kawneer 1600 to match existing.
- Level 1-2 Cladding – Stainless steel mesh with structural steel support to match existing.
- Level 6 Roof – PVC with EPS insulation. (Includes stair tower extensions)
- Level 1-4 Sack all remaining, exposed concrete

Architectural Interior

Level 1	Finishes, Lobby and stair tower: BOMA Class A equivalent.
Level 5-6	Partitions: 70% cold formed framed, 30% glazed demountable.
Level 5-6	Finishes: Class B
Level 4-6	Finishes, stair tower extension: BOMA Class B equivalent.

Mechanical

A complete new mechanical system will be required to serve all approximately 46,000 SF of new enclosed Consolidated City Services.

Ventilation	Full mechanical
Heating	Fuel oil boiler with electric boiler back-up
Heating Alt	Air-source heat pump – utilize level 6 roof.
Cooling	Zoned, in-line coils – condensers utilize level 6 roof.

Electrical

A complete new electrical system will be required to serve 46,000 SF of new enclosed Consolidated City Services. Electrical plan will also introduce new area lighting to the now covered 4th floor of the garage.

Power:	Standard for office use
Data:	Standard for office use
Lighting	Office: LED
Lighting	Garage: LED
Special	Closed circuit TV all new and existing stair towers, access control all main exterior and main interior doors.

Landscape

Level 1	Minimal - Coordinate with Civil
---------	---------------------------------

Attachments: Structural Narrative – 2 pages
Plan Diagram – 1 page
Cost analysis summary – 1 page
Owner's Program/Space Planning Draft – 6 pages
Benefit Cost analysis – 20 pages

December 31, 2018

NorthWind
Architects, LLC

Project: CBJ DTC City Hall Addition Study

Attachment: Structural Narrative – 2 pages

126 Seward Street
Juneau, AK 99801

p.907.586.6150
f.907.586.6181



www.dci-engineers.com

Washington
Oregon
California
Texas
Alaska
Colorado
Montana

August 27, 2018

Northwind Architects
Attn: Dave Hurley
126 Seward Street
Juneau, AK 99801

Re: Juneau City Hall Expansion – Structural Narrative

Dear Dave:

The purpose of this letter is to provide a structural narrative regarding the proposed design of the Juneau City Hall Expansion project to be used during conceptual architectural design. DCI's understanding of the project is based on correspondence with Northwind Architects and a review of the structural drawings for the existing parking garage prepared by ABKJ and dated 3/27/09. In addition, Erik Pearson is an Associate in our Seattle office and was the structural project manager for the project when he was previously employed by ABKJ.

The existing parking garage is four-stories and is located on a sloping site. The gravity force resisting system consists of post-tensioned concrete beams and slabs supported by concrete columns. The lateral force resisting system consists of special reinforced concrete shear walls. The original design considered a future three-story addition above the top story of the existing parking garage. We understand that the current design intent is to add three stories of office with possibly some parking added as well. There may also be the desire to add another stair that is either interior or added to the exterior.

The existing structural drawings include an explanation of the design criteria utilized in the original design as shown below and also indicate that the design code was the 2006 IBC.



FUTURE OFFICE EXPANSION. LEVELS 5 THROUGH 7:

DESIGN ASSUMPTIONS:

THREE LEVELS OF OFFICE SPACE OCCUPYING THE SAME PLAN AREA AS THE GARAGE BELOW. STEEL FRAME CONSTRUCTION WITH CONCRETE SHEAR WALLS CONTINUING UP FROM GARAGE BELOW. FLOOR SLAB, 3" METAL DECK WITH 2 1/2" CONCRETE TOPPING. EXTERIOR CLADDING SYSTEM TO WEIGH A MAXIMUM OF 40 PSF AVERAGE.

DESIGN LIVE LOADS:

OFFICE FLOOR	= 50 PSF
GROUND SNOW	= 50 PSF, $I_s = 1.1$
CORRIDORS, STAIRS	= 100 PSF
WIND AND SEISMIC	= SAME AS GARAGE BELOW



This provides the design criteria that should be followed for the design of new office space. In areas that might be parking, the overall loads of the original framing system are comparable to the above system so it should be possible to utilize a post-tensioned concrete system. The architectural design should also ensure that the existing concrete column and shear wall locations can continue through the additional floor levels. If an interior stair is required, the location will have to be coordinated with DCI and also a specialty concrete sub-contractor that can help to design the post-tension tendon anchoring requirements at the existing slabs. If parking is continued to upper levels the ramp location will need to be coordinated. The ramp and it's support from the current L4 slab may require some modifications to the existing structure. Also the best spot for the new ramp would likely be stacked on top of the current ramp system between Grids 1 and 2.

There have been some changes to the requirements for concrete construction between the 2006 IBC code used for the design of the original garage and the current 2012 IBC code, particularly with respect to seismic loads and seismic detailing. We would request that the City of Juneau allow the existing construction, even with added levels, to remain compliant with the original 2006 IBC code and not require upgrading any elements to comply with the current 20012 IBC code.

Please let me know if there are any questions or comments regarding this letter. We look forward to continuing to contribute to the success of this project.

Sincerely,
DCI Engineers



Paul Rogness PE, SE
Principal

c.c. Erik Pearson, Associate
DCI Engineers

December 31, 2018

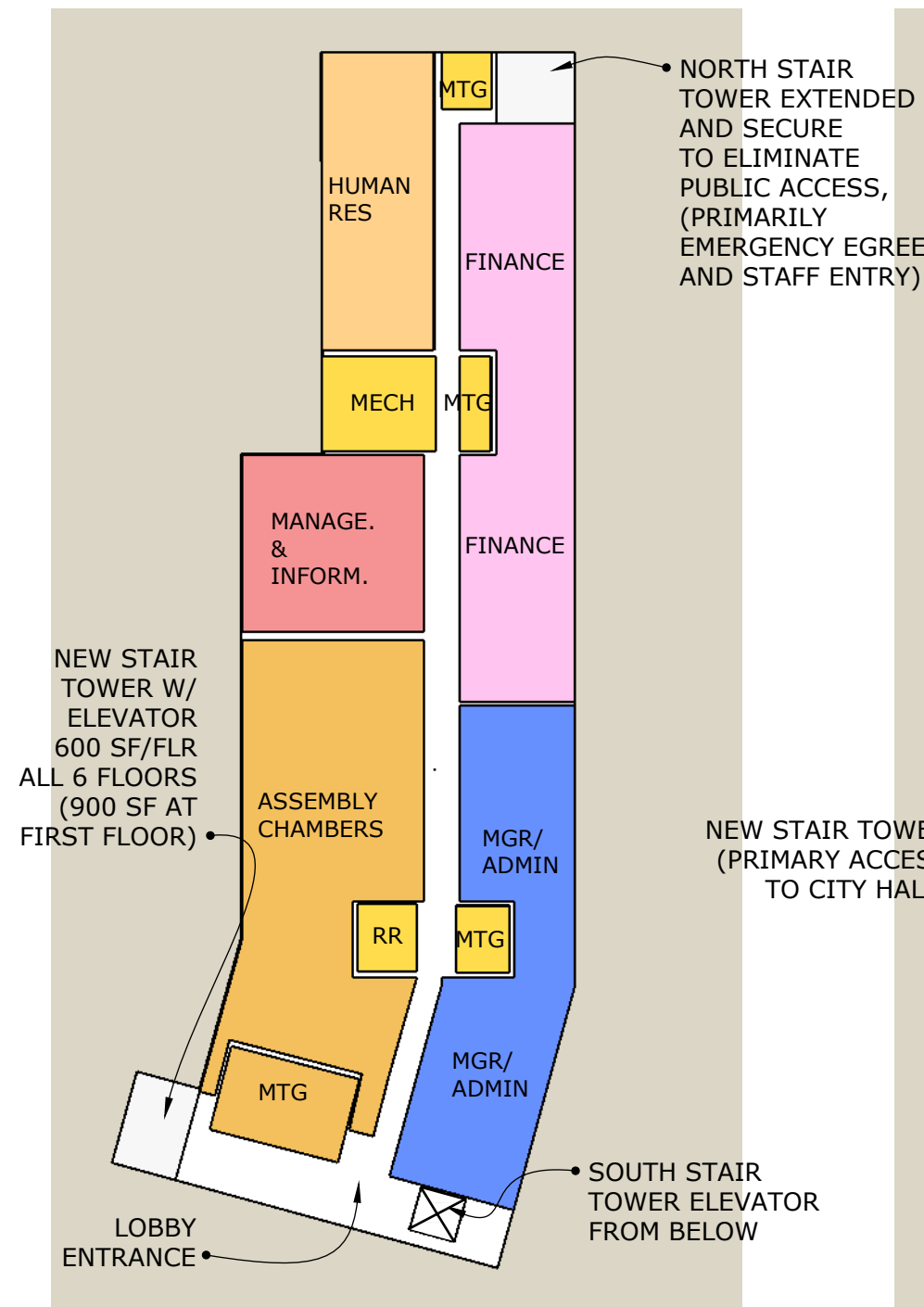
NorthWind
Architects, LLC

Project: CBJ DTC City Hall Addition Study

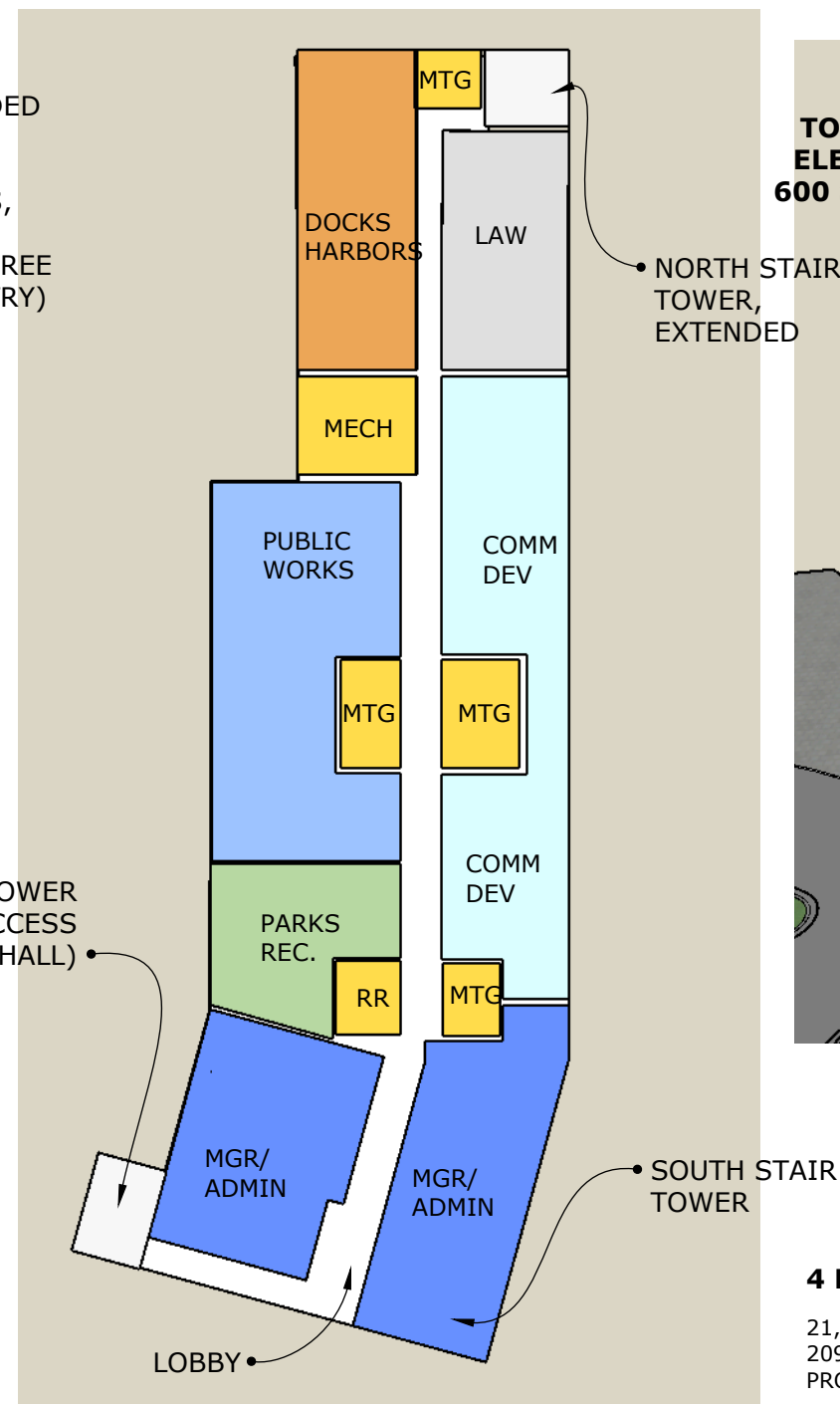
Attachment: Plan Diagram – 1 page

126 Seward Street
Juneau, AK 99801

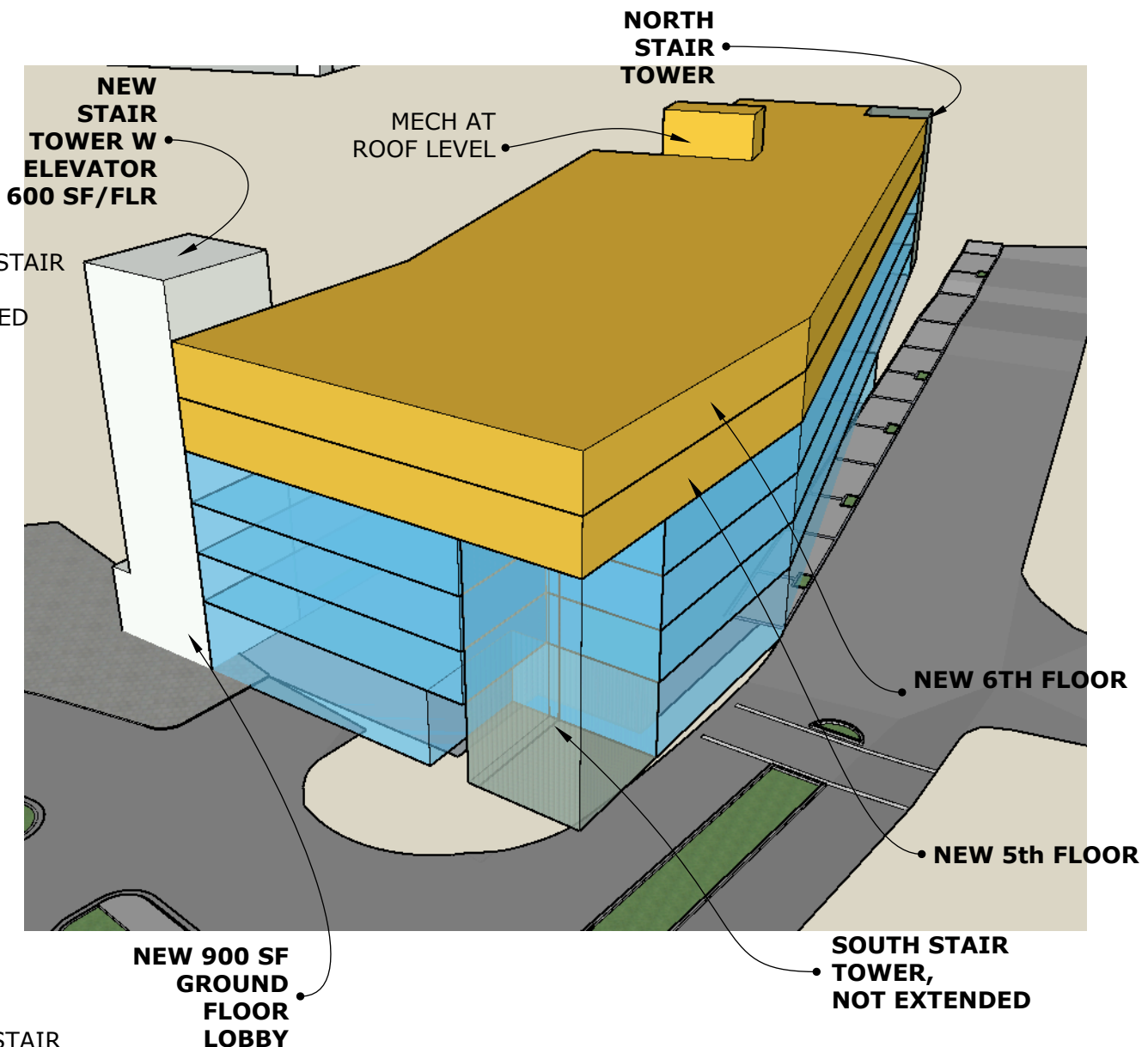
p.907.586.6150
f.907.586.6181



5TH FLOOR OFFICE PROGRAM
21,700 SF



6TH FLOOR OFFICE PROGRAM
21,700 SF



4 LEVELS OF EXISTING PARKING

21,562 SF
209 CURRENT TOTAL PARKING SPACES
PROPOSED MINIMAL OR NO CHANGE

- 46,100 SF GROSS ADDED OFFICE AREA
- EXIST. PARKING LEVELS 1-4 NO CHANGE

- MANAGER AND ADMIN SERVICES**
4,410 SF
- MANAGEMENT AND INFORMATION SYSTEMS**
2,080 SF
- COMMUNITY DEVELOPMENT**
3,705 SF

- DOCKS AND HARBORS**
1,180 SF
- FINANCE**
4,950 SF
- HUMAN RESOURCES**
1,800 SF

- PARKS AND RECREATION**
1,350 SF
- PUBLIC WORKS**
3,325 SF
- LAW**
1,700 SF

- OTHER**
9,261 SF
- CIRCULATION**

CITY HALL PLANNING

PROGRAM - 2 FLOOR ADDITION ABOVE CURRENT 4TH FLOOR PARKING LEVEL

10-16-18

December 31, 2018

NorthWind
Architects, LLC

Project: CBJ DTC City Hall Addition Study

Attachment: Cost analysis summary – 1 page

126 Seward Street
Juneau, AK 99801

p.907.586.6150
f.907.586.6181

NEW CITY HALL BUSINESS CASE - CONSTRUCTION COST ESTIMATE

Tuesday, September 11, 2018

Combined NorthWind and Owner Cost information

Program Space Required

45,968 SF

Floor Area

Floor 5 21,700 SF

Floor 6 21,700 SF

Floor 1 Addition 900 SF

Stair/Elevator Tower 360*5 flr 1,800 SF

Total 46,100 SF

Wall Area

14 Feet/Story

Floor 5 10,290 SF

Floor 6 10,290 SF

Floor 1 Addition 1260 SF

Stair/Elevator Tower 360*5 flr 5,460 SF

Total 27,300 SF

	QTY	UNIT	\$/UNIT	TOTAL
A Substructures				
A10 Foundations	900	SF	\$35	\$31,500
A40 Slab on Grade	900	SF	\$10	\$9,000
B Shell				
B10 Superstructure	46,100	SF	\$61	\$2,812,100
B20 Exterior Closure	27,300	SF	\$80	\$2,184,000
B30 Roofing	24,400	SF	\$30	\$732,000
C Interiors				
C10 Interior Construction	46,100	SF	\$31	\$1,429,100
C20 Interior Finishes	46,100	SF	\$21	\$968,100
D Services				
D10 Conveying	2	EA	\$350,000	\$700,000
D20 Plumbing	46,100	SF	\$5.61	\$258,621
D30 HVAC	46,100	SF	\$37.82	\$1,743,502
D40 Fire Protection	46,100	SF	\$5.34	\$246,174
D50 Electrical	46,100	SF	\$34.17	\$1,575,237
D60 Communication	46,100	SF	\$7.47	\$344,367
D70 Electronic Safety and Security	46,100	SF	\$4.00	\$184,400
D80 Facility Controls	46,100	SF	\$8.00	\$368,800
E Equipment				
E10 Equipment	1	LS	\$8,000	\$8,000
E20 Furnishings	46,100	SF	\$7.75	\$357,275
E30 Office Workstations (reduced 40% MUs)	120	EA	\$4,464	\$535,714
F Special Construction and Demolition				
F10 Special Construction		NONE	\$0	\$0
F20 Facility Remediation		NONE	\$0	\$0
F30 Demolition	1	LS	\$50,000	\$50,000
G Sitework				
G10 Site Preparation	1	LS	\$50,000	\$50,000
G20 Site Improvements	1	LS	\$16,000	\$16,000
G30 Site Utilities	1	LS	\$50,000	\$50,000
G40 Site Electrical	1	LS	\$80,000	\$80,000
G50 Site Communications	1	LS	\$60,000	\$60,000

TOTAL CONSTRUCTION COST	46,100	GSF	\$14,793,890
general requirements	12%		\$1,775,267
Taxes, Pemits, Bonds	3.50%		\$517,786
fees (contractor)	4%		\$591,756
Contingency	15%		\$2,219,084
Escalation	4.50%		\$665,725
TOTAL CONSTRUCTION COST	46,100	GSF	\$20,563,507
			\$446.06
TOTAL PROJECT COST (30% add)	46,100	GSF	\$26,732,560
			\$579.88

December 31, 2018

NorthWind
Architects, LLC

Project: CBJ DTC City Hall Addition Study

Attachment: Owner's Program/Space Planning Draft – 6 pages

126 Seward Street
Juneau, AK 99801

p.907.586.6150
f.907.586.6181

JUNEAU CITY HALL SPACE PLANNING DRAFT

PROPOSED DEPARTMENT AREAS

PROPOSED SF	Department	Title	Adjacency
LANDS			
	100	LN-ADMIN	Dep Land Mgr
	140	LN-ADMIN	Lands Res Mgr
	100	LN-ADMIN	Lands Spec
Sub-total	340		
	200	Other: storage	
Total	540		
MGR			
	100	ADMN-CLE	Dep Muni Clrk
	120	ADMN-CLE	Muni Clerk
	202	Admin-Assm	Mayor
	140	Admin-Assm	Assembly
	100	ADMN-MGR	Chief Housing
	200	ADMN-MGR	Dep City Mgr
	80	ADMN-MGR	Exec Asst II
	80	ADMN-MGR	Housing & Hom
	100	ADMN-MGR	Exec Asst III
	80	ADMN-MGR	Exec Asst I
	201	ADMN-MGR	City Mgr
	80	Public Info	Public Info Officer
Sub -total	1,483		
	0	SMALL CONFERENCE ROOM	
	100	WAITING AREA	
	50	RECEPTION COUNTER	
	300	STORAGE/ EMERGENCY PROGRAM STORAGE	
	200	MAP STORAGE	
Total	2,133		
MIS			
	100	MIS-ADMN	ComSp Spc III
	100	MIS-ADMN	Com Sp Spc II
	100	MIS-ADMN	Prog Ana II
	100	MIS-ADMN	AA II
	100	MIS-ADMN	Prog Ana III
	100	MIS-ADMN	Prog Ana I
	100	MIS-ADMN	Com Sp Spc II
	100	MIS-ADMN	Net Spec II
	100	MIS-ADMN	Net Spec I
	100	MIS-ADMN	Prog Ana II
	100	MIS-ADMN	Prog Ana II
	200	MIS-ADMN	MIS Dir
	120	MIS-ADMN	GIS Tech
	140	MIS-ADMN	Sys Op Mgr

JUNEAU CITY HALL SPACE PLANNING DRAFT

PROPOSED DEPARTMENT AREAS

	PROPOSED SF	Department	Title	Adjacency
	100	MIS-PRIN	Print Serv Cr	
Sub-total	1,660			
	0	Small conference room		
	300	Server Storage		
Total	1,960			
COMMUNITY DEVELOPMENT				
	100	CDD-ADMI	AA I	Planning
	120	CDD-ADMI	AO I	
	100	CDD-ADMI	AA II	Planning
	200	CDD-ADMI	CDD Dir	
	100	CDD-ADMI	Perm Tech II	Permit Center
	100	CDD-ADMI	Perm Tech III	Permit Center
	100	CDD-ADMI	Perm Spec	Permit Center
	120	CDD-ADMI	Cartographer	Planning, MIS, Lands
	140	CDD-BLD	Bld Code Off	Permit Center
	140	CDD-BLD	Bld Insp IV	Permit Center
	100	CDD-BLD	Bld Insp III	Permit Center
	100	CDD-BLD	Bld Insp III	Permit Center
	80	CDD-BLD	Cod Cmp Off I	Permit Center
	100	CDD-BLD	Bld Insp III	Permit Center
	100	CDD-BLD	Plan Reviewer	Permit Center
	100	CDD-PLAN	Planner I	Permit Center
	100	CDD-PLAN	Sr Planner	Permit Center
	100	CDD-PLAN	Sr Planner	Permit Center
	100	CDD-PLAN	Planner I	Permit Center
	100	CDD-PLAN	Sr Planner	Permit Center
	100	CDD-PLAN	Planner II	Permit Center
	100	CDD-PLAN	Planner II	Permit Center
	100	CDD-PLAN	Planner I	Permit Center
	140	CDD-PLAN	Planning Mgr	Permit Center
Sub-total	2,640			
	0	SMALL CONFERENCE ROOM		
	200	SPACE FOR PLANS,STORAGE, LIBRARY		
	0	LARGE CONFERENCE		
	300	PERMIT CENTER		
	100	WAITING		
	0	COPY ROOM/ENGINEERING		
Total	3,240			
DOCKS AND HARBORS				
	140	DOCK-CIP	Eng/Arch II	
	100	DOCK-CIP	Eng/Arch I	
	125	DOCK-CIP	Eng/Arch I	

JUNEAU CITY HALL SPACE PLANNING DRAFT

PROPOSED DEPARTMENT AREAS

	PROPOSED SF	Department	Title	Adjacnecy
	100	DOCK-OP	AO I	
	200	DOCK-OP	Port Dir	
	80	DOCK-OP	Intern V	
	80	DOCK-OP	AA I	
Sub-total	825			
	0	Small conference room		
	200	Storage		
Total	1,025			
FINANCE				
	200	FIN-ADMI	Finance Dir	
	100	FIN-ADMI	AA II	
	100	FIN-ASSE	BPP App I	
	100	FIN-ASSE	App I	
	120	FIN-ASSE	App III	
	100	FIN-ASSE	App I	
	100	FIN-ASSE	AA II	
	120	FIN-ASSE	Assessor	
	80	FIN-ASSE	App II	
	80	FIN-CNTR	Acct II	
	80	FIN-CNTR	Acct II	
	80	FIN-CNTR	Acct Tech I	
	120	FIN-CNTR	Asst Controll	
	80	FIN-CNTR	Budget Analy	
	80	FIN-CNTR	Acct II	
	80	FIN-CNTR	Acct III	
	120	FIN-CNTR	Pay Mgr	
	100	FIN-CNTR	PayTech	
	140	FIN-CNTR	Controller	
	80	FIN-CNTR	Acct II	
	100	FIN-CNTR	Acct Tech II	
	100	FIN-CNTR	Sr Pay Tech	
	100	FIN-PRCH	Acct Tech I	
	100	FIN-PRCH	Buyer	
	100	FIN-PRCH	Sr Buyer	
	120	FIN-PRCH	Purch Off	
	100	FIN-PRCH	Bid Spec	
	80	FIN-SALE	TxCmp Acct II	
	80	FIN-SALE	Acct Tech I	
	80	FIN-SALE	TxCmp Acct II	
	100	FIN-SALE	Sales Tax Adm	
	80	FIN-SALE	Acct Tech I	
	80	FIN-TREA	Acct Tech I	
	80	FIN-TREA	City Cashier	
	120	FIN-TREA	Treasurer	

JUNEAU CITY HALL SPACE PLANNING DRAFT

PROPOSED DEPARTMENT AREAS

	PROPOSED SF	Department	Title	Adjacency
	100	FIN-TREA	Acct Tech III	
	80	FIN-TREA	City Cashier	
	80	FIN-TREA	Off Asst II	
	80	FIN-TREA	Acct Tech I	
	80	FIN-TREA	Acct Tech I	
	120	FIN-TREA	Acct Tech III	
	100	FIN-TREA	Rev Coll II	
	80	FIN-TREA	Acct Tech I	
	120	FIN-TREA	Acct III	
	80	FIN-TREA	Acct II	
Sub-total	4,400			
	100	PUBLIC COUNTER- ASSESSOR		
	100	PUBLIC COUNTER -TAX		
	300	STORAGE		
		Other		
Total	4,900			
HUMAN RESOURCES				
	100	HR-HR	HR Tech II	
	80	HR-HR	HR Cons II	
	200	HR-HR	HR&RM Dir	
	100	HR-HR	HR Mgr	
	80	HR-HR	HR Cons I	
	80	HR-HR	HR Tech I	
	80	HR-RISK	Off Asst II	
	100	HR-RISK	Rsk Mgmt Off	
	80	HR-RISK	Safety Off	
	100	HR-RISK	Rsk Mgmt Spec	
	80	HR-WELL	Well Coord	
Sub-total	1,080			
	0	PRIVATE PRINT ROOM		
	100	PUBLIC COUNTER (ADA)		
	400	STORAGE: 42 FILING CABINETS		
	0	CLIMATE CONTROLLED STORAGE		
Total	1,580			
LAW				
	100	LAW-LEGA	Asst Attn III	
	100	LAW-LEGA	Lit Spt Asst	
	100	LAW-LEGA	Asst Attn II	
	100	LAW-LEGA	Lit Spt Asst	
	100	LAW-LEGA	Lit Spt Asst	
	200	LAW-LEGA	City Attorney	
	100	LAW-LEGA	Asst Attn III	
	140	LAW-LEGA	Asst Attn III	

JUNEAU CITY HALL SPACE PLANNING DRAFT

PROPOSED DEPARTMENT AREAS

	PROPOSED SF	Department	Title	Adjacency
	100	LAW-LEGA	Lit Spt Asst	
	100	LAW-LEGA	Law Off Mgr	
	100	LAW-LEGA	Asst Attn III	
	100	LAW-LEGA	Asst Attn II	
Sub-total	1,340			
	100	Storage		
	100	Internal Hall		
	120	Library		
	100	Waiting area		

Total 1,760

PARKS AND RECREATION

	120	PR-ADMIN	AO II	
	120	PR-ADMIN	Proj Mgr	
	200	PR-ADMIN	P&R Dir	
	80	PR-ADMIN	AA II	
	80	PR-ADMIN	Bld Custodian	
	120	PR-AREA	Rec Mgr	
	80	PR-REC	Admin Asst I	
	80	PR-REC	REC I	
Sub-total	880			
	100	Public Counter		
	200	Storage		
	0	conference room		

Total 1,180

PUBLIC WORKS

	100	PW ENG-C	E/A Assoc	
	140	PW ENG-C	Eng/Arch III	
	100	PW ENG-C	Contract Spec	
	140	PW ENG-C	Eng/Arch I	
	100	PW ENG-C	E/A Assoc	
	140	PW ENG-C	Eng/Arch III	
	100	PW ENG-C	E/A Assoc	
	100	PW ENG-C	Contract Spec	
	120	PW ENG-C	AO I	
	140	PW ENG-C	Eng Cont Adm	
	100	PW ENG-C	Eng/Arch I	
	100	PW ENG-C	Eng/Arch I	
	100	PW ENG-C	Eng/Arch I	
	100	PW ENG-C	E/A Assoc	
	100	PW ENG-C	E/A Assoc	
	100	PW ENG-C	Eng/Arch I	
	100	PW ENG-C	Eng/Arch I	
	100	PW ENG-G	E/A Assoc	Y/CDD

JUNEAU CITY HALL SPACE PLANNING DRAFT

PROPOSED DEPARTMENT AREAS

PROPOSED SF	Department	Title	Adjacency
100	PW ENG-G	Eng/Arch III	
100	PW ENG-G	E/A Asst I	Y/CDD
200	PW-ADMIN	PW Eng Dir	
80	PW-UTILI	Sr Mtr Svc T	Y/CDD
100	PW-UTILI	Acct Tech I	Y/CDD
80	PW-UTILI	Mtr Svc Tech	Y/CDD
140	PW-UTILI	Eng & PW Busi	Y/CDD
80	PW-WST M	RecycleWorks	Y/ENG
100	PW-WST M	Solid Wst Cr	
Sub-total	2,960		
	0	Medium Conference Room	
	150	storage water meter yokes	
	520	Storage: Drawings & Project Documents	
	100	Waiting area	
Total	3,730		

TOTAL OFFICE 22,048 SF

CIRCULATION			
200	ENTRY LOBBY		
11,116	CORRIDORS		
600	STAIRS		
400	ELEVATOR		
OTHER			
125	MAIL ROOM		
800	2 KITCHENS/ BREAK ROOMS		
2,000	CHAMBERS		
800	CHAMBERS - Commons/Overflow		
400	1 LARGE CONFERENCE ROOMS		
400	2 MEDIUM CONFERENCE ROOMS		
300	2 SMALL CONFERENCE ROOMS		
400	WOMENS RESTROOM - 1 per floor		
400	MENS RESTROOM - 1 per floor		
800	PRINT/WORK ROOMS - 1 per floor		
400	TRAINING ROOM		
400	GENERAL STORAGE - 1 per floor		
100	NURSING STATION		
100	JANITOR - 1 per floor		
Total	19,741		

	41,789	
10%	4,179	GSF FACTOR - STRUCTURE, MECHANICAL, ELECTRICAL

45,968 GSF

December 31, 2018

NorthWind
Architects, LLC

Project: CBJ DTC City Hall Addition Study

Attachment: Benefit Cost analysis – 20 pages

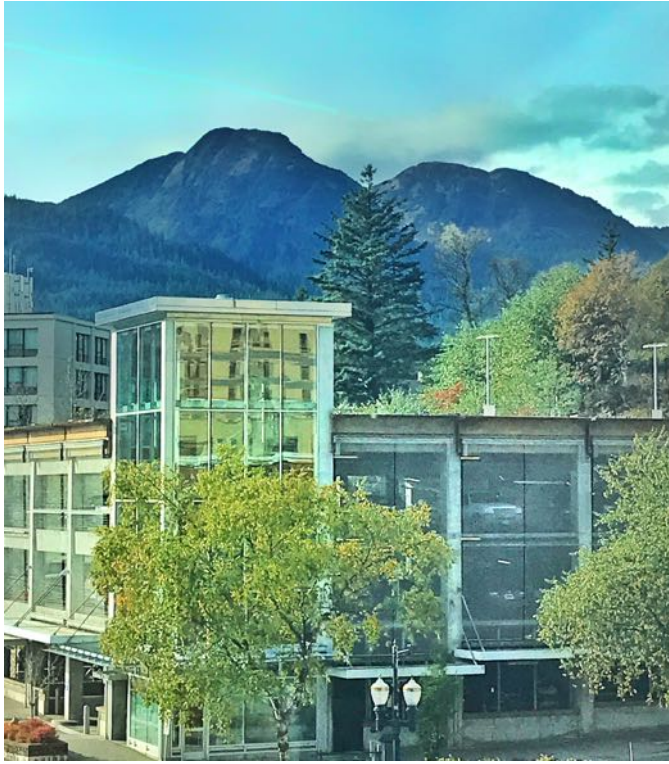
126 Seward Street
Juneau, AK 99801

p.907.586.6150
f.907.586.6181

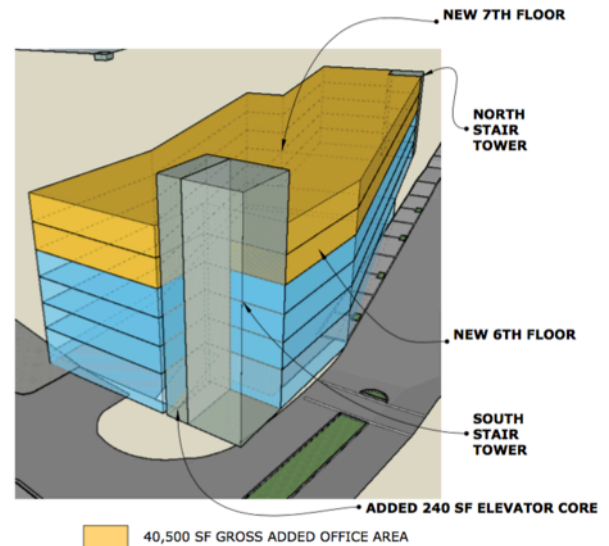
December 31, 2018

Cost Benefit Analysis of Proposed City and Borough of Juneau City Hall

Project Description and Summary	1
Analysis Approach	2
Multiplier Effect.....	3
Current City Hall Configuration	4
Economic Benefits and Costs	6
Value of Lease Payments Saved	7
<i>Sales Tax Collection Potential.....</i>	<i>8</i>
Potential Sale of 155 South Seward Building.....	9
<i>Property Tax Collection Potential</i>	<i>10</i>
Reduced Operation and Maintenance Costs	11
<i>Increased Energy Costs</i>	<i>11</i>
<i>Increased Ownership Costs</i>	<i>11</i>
<i>Avoided Maintenance Expenditures</i>	<i>12</i>
Renewal and Replacement Account Costs	13
Financing.....	15
City Hall Construction Multiplier Effect	16
<i>Project Costs</i>	<i>16</i>
<i>Direct Spending Impacts</i>	<i>16</i>
<i>Secondary Effects</i>	<i>17</i>
Additional Considerations	17
Consolidated Work Environment.....	17
Increased Downtown Housing	17
Full Economic Model and Assumptions.....	19



New City and Borough of Juneau City Hall: location photo and drawing of proposed new facility.



Project Description and Summary

Consolidating office space and municipal staff has long been the top internal priority for City and Borough of Juneau (CBJ) management. Employees are currently dispersed among five downtown locations. Building a new city hall would aggregate CBJ staff in a single location, save the city \$775,000 in annual lease costs, and allow for the sale of the municipal building located at 155 South Seward. This memo presents an analysis of the expected public benefits and costs of developing a new city hall building in the community of Juneau.

Design, permitting, and 18-month construction of the City Hall are scheduled to occur over a five-year period ending in 2023. The estimated project costs for all elements of the proposed 45,970 square foot City Hall¹— including construction and financing— is \$38.5 million. It would be built on top of the existing downtown parking garage and would be designed to hold 165 workers with improved public access to city hall services.

¹ Currently CBJ City Hall staff and services are divided among five buildings that provide 49,936 square feet of space for CBJ staff.

Analysis Approach

The cost-benefit analysis for this project was prepared by Rain Coast Data. This analysis considers all reasonable project costs and monetizable benefits over a 40-year horizon (2019–2059). Once construction is completed, it will take 37 years for the project to become a cost benefit to the CBJ.² By year 42 the project will have saved the municipality \$5 million compared to the status quo as a result of savings and new revenues associated with vacating leased office space.

Table 1 summarizes the cumulative costs and benefits (revenues and savings) over the initial 37 years. Savings over that period include \$36.2 million in saved rent; nearly one million dollars in potential sales tax earning; \$5.6 million for the sale of the current city hall and property tax revenue earned on that building after the sale; \$9.7 million in saved renewal and replacement budgeting; and \$15.6 million in saved operation and maintenance costs on the current city hall. Costs include \$26.7 million in construction related costs for a new city hall; \$11.8 million in associated financing costs; \$9.8 million dedicated to a renewal replacement savings account; and \$19.3 million in additional ownership costs, including utilities, custodial, and maintenance.

Table 1. Cost Benefit Summary for New CBJ City Hall, 37 Years: 2023-2059

Measure	CBJ Savings and Revenues Over 37 Years (Cumulative)	
Total Savings of New City Hall Over 37 Years	\$68,069,538	
Rent for CBJ Leased Offices	\$36,230,106	See page 7
Potential Sales Tax CBJ would receive if these properties were rented by a non CBJ tenant	\$974,834	See page 8
Property Tax CBJ would receive if current City Hall were privately owned, plus sales value of current City Hall	\$5,562,469	See page 10
Current City Hall Renewal and Replacement Account	\$9,700,888	See page 14
Current City Hall Operation and Maintenance Costs	\$15,601,240	See page 12
Total Costs of New City Hall Over 37 Years	-\$67,563,126	
Construction Project Costs for new City Hall	-\$26,732,560	
Financing Costs for new City Hall	-\$11,747,250	See page 15
New City Hall Renewal and Replacement Account	-\$9,800,431	See page 13
New City Hall Operation and Maintenance Costs	-\$19,282,885	See page 12
Total Savings after 37 Years	\$506,412	

Note: The economic model leaves out one variable: \$2.06 million in project costs are likely to be paid back to CBJ for purposes of management and cost overhead.

² Note that different assumptions result in different total years until a breakeven point.

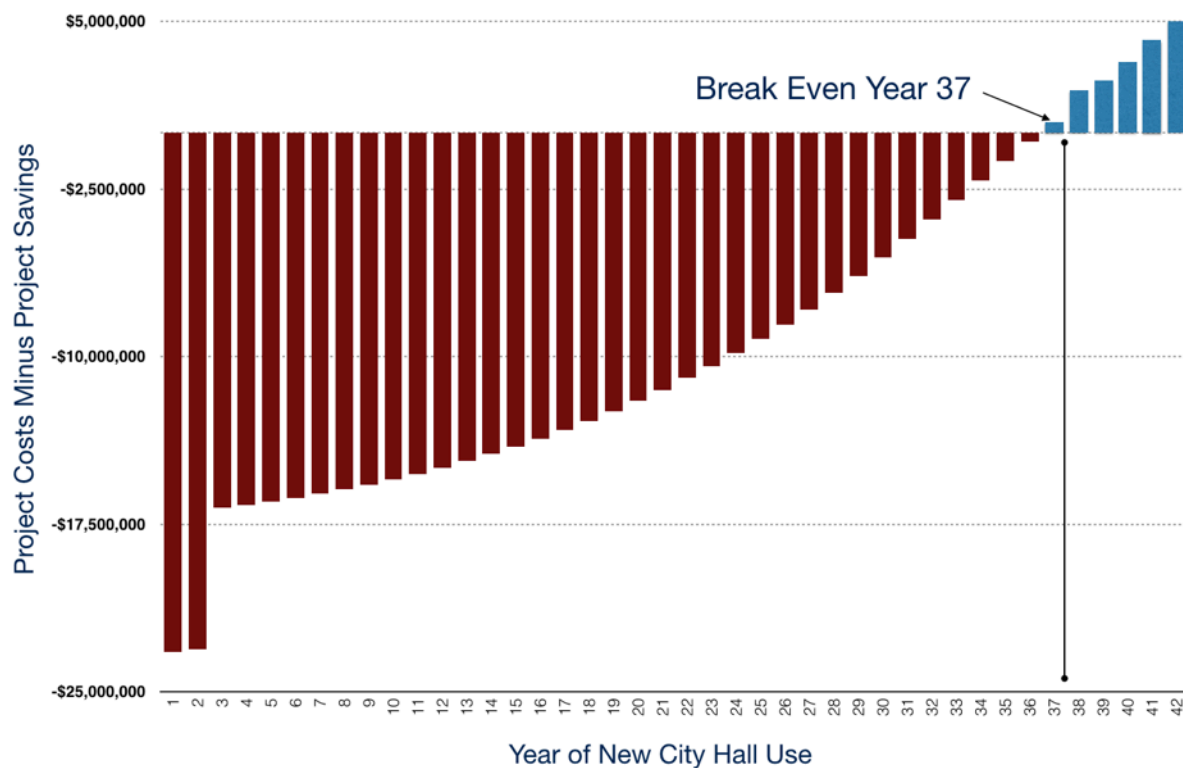
In 2018 the CBJ spent just over \$1 million on CBJ offices, as presented in table 2.

Table 2. Cost Summary for Current CBJ City Hall Offices, 2018

Measure	2018 Costs to CBJ
Rent for CBJ Leased Offices	\$775,000
Current City Hall Ownership and Maintenance Costs	\$264,877
Total 2018 Costs	\$1,039,389

If a new city hall is built, the city is projected to save a net aggregate \$506,412 by the end of 37 years.

Chart 1. Cost of New Juneau City Hall Versus Benefits by Year



Multiplier Effect



In addition to the direct financial benefits to CBJ described above, total economic impacts from construction spending, including multiplier effects, would add \$22.4 million to the Juneau economy. This aggregate, one-time impact during the construction phase includes a projected \$8.3 million in earnings associated with 151 new jobs (directly and indirectly) generated by the project.

Current City Hall Configuration

Currently CBJ City Hall staff and services are divided among five buildings: the Sealaska Plaza, the Municipal Way Building, the Marine View Building, the Seadrome Building, and the current City Hall on South Seward Street. These five structures provide 49,936 square feet of space for 163 municipal employees at a total cost of \$1,039,339 per year. This includes \$775,000 in rent for the four leased spaces, with the balance consisting of ownership costs for the current city hall building on South Seward Street.³ (See following page).

³ The rental agreements include all utilities, maintenance, and janitorial costs.

Table 3: Current Juneau City Hall Configuration and Annual Costs

Current Office Space	Employees	Square Footage	2018 Yearly Costs
Sealaska Plaza 	11	2,600 Lease agreement until 2023	\$73,743
Municipal Way Building 	35	12,125 Lease agreement until 2020	\$286,947
Seadrome Building 	7	1,809 Month-to-month lease	\$56,101
Marine View Building 	51	17,090 Lease agreements until 2019 & 2020	\$357,720
Existing City Hall 	59	16,312 CBJ owns building Estimated value = \$3.4 million	\$264,877 (includes utilities, maintenance, janitorial, public restrooms)
Total	163 staff	49,936 sq. ft.	\$1,039,339

Economic Benefits and Costs

The full cost of construction for a new Juneau city hall is projected to be \$26.7 million with an additional \$11.8 million in financing costs. The benefits consist of a combination of savings and revenues related to vacating current CBJ offices. To understand the time it will take for the city to recover this investment, the following benefits were quantified:

- The value of lease payments saved,
- Sales tax collection potential,
- Proceeds from sale of current city hall,
- Potential to collect property tax after sale of current city hall, and
- Eliminated operation and maintenance costs of owning current city hall.

Value of Lease Payments Saved

The city's three leases cost \$775,000 in 2018. The leases are expected to increase at a rate of 1% annually.⁴

Table 4: Projected CBJ Office Rent: 2023 to 2059

Year City Hall is Completed	Year	Value of Rent Saved
1	2023	\$814,020
2	2024	\$822,160
3	2025	\$830,382
4	2026	\$838,685
5	2027	\$847,072
6	2028	\$855,543
7	2029	\$864,098
8	2030	\$872,739
9	2031	\$881,467
10	2032	\$890,281
11	2033	\$899,184
12	2034	\$908,176
13	2035	\$917,258
14	2036	\$926,430
15	2037	\$935,695
16	2038	\$945,052
17	2039	\$954,502
18	2040	\$964,047
19	2041	\$973,688
20	2042	\$983,425
21	2043	\$993,259
22	2044	\$1,003,191
23	2045	\$1,013,223
24	2046	\$1,023,356
25	2047	\$1,033,589
26	2048	\$1,043,925
27	2049	\$1,054,364
28	2050	\$1,064,908
29	2051	\$1,075,557
30	2052	\$1,086,313
31	2053	\$1,097,176
32	2054	\$1,108,147
33	2055	\$1,119,229
34	2056	\$1,130,421
35	2057	\$1,141,725
36	2058	\$1,153,143
37	2059	\$1,164,674
37	Total	\$ 36.2 million

⁴ Source: Personal Communication Bob Bartholomew Director of Finance and Nathan Coffee City Architect November 15, 2018. "To remain conservative in our assumptions we should use a 1% annual rent increase for future CBJ rental costs." While no comprehensive rate study has occurred, there is some evidence that this rate should be higher. Over the past 33 years (the total period of data available), the Anchorage CPI has averaged 2.36% per year. A Carlton Smith Company memo, *Trends in Lease Terms for the Juneau Office Market 2018*, states: "For the last decade, we have seen 3% annual rent increased in most commercial leases. However, the budget woes of the state are translating into smaller annual increases...Today we see annual increases in the 2% range." Assuming a lease with a 1% annual increase means assuming landlords will not pass along building renewal and replacement costs along to the CBJ, resulting in a very advantageous deal for the municipality.

The model projects that the city hall will break even after 37 years of use, at which point \$36.2 million in rent will have been saved.⁵ (Note that a 2% rate would result in a 30-year breakeven point, while a 3% rate would reduce that period to 25 years.)

Sales Tax Collection Potential

Commercial leases are subject to the city's 5% sales tax. Once CBJ vacates its leased spaces, the city will potentially receive a sales tax benefit currently unrealized on these properties, as the city does not collect sales tax for properties it uses. At the request of the CBJ, for the purposes of this analysis, it is assumed that the leased space in the Marine View Building will be converted to apartment units and rented as housing, so that this rent (currently \$357,720 or 46% of all current CBJ leases associated with this project) will be exempt from sales tax and thus will not result in direct sales tax revenue for the CBJ.⁶

Table 5: Projected Sales Tax Rent Advantage: 2023 to 2059

Year City Hall is Completed	Year	Sales Tax on Commercial Rental Income
1	2023	\$21,903
2	2024	\$22,122
3	2025	\$22,343
4	2026	\$22,566
5	2027	\$22,792
6	2028	\$23,020
7	2029	\$23,250
8	2030	\$23,483
9	2031	\$23,717
10	2032	\$23,955
11	2033	\$24,194
12	2034	\$24,436
13	2035	\$24,680
14	2036	\$24,927
15	2037	\$25,177
16	2038	\$25,428
17	2039	\$25,683
18	2040	\$25,939
19	2041	\$26,199
20	2042	\$26,461
21	2043	\$26,725
22	2044	\$26,993
23	2045	\$27,263
24	2046	\$27,535
25	2047	\$27,811
26	2048	\$28,089
27	2049	\$28,370
28	2050	\$28,653
29	2051	\$28,940
30	2052	\$29,229
31	2053	\$29,521
32	2054	\$29,817
33	2055	\$30,115
34	2056	\$30,416
35	2057	\$30,720
36	2058	\$31,027
37	2059	\$31,338
37	Total	\$ 974,834

⁵ The analysis does not take into account a potential period of time in which the CBJ will be continuing to pay rent after completion of a new city hall. Assuming such a period would delay the breakeven point slightly.

⁶ Assuming this amount was not excluded, the break-even point would move up by one year.

Within 37 years of vacating these leases (the projected break-even year for a new city hall) the CBJ would expect to collect nearly one-million in sales tax dollars on these properties – assuming the properties would be leased commercially at similar inflation-adjusted rates.

No know data has been collected on Juneau commercial rental vacancy rates. For the purpose of this analysis, it is assumed that the units would have a zero percent vacancy rate.⁷

Potential Sale of 155 South Seward Building

The CBJ owns the current City Hall at 155 South Seward Street. This analysis assumes the building will be sold and that the proceeds would accrue back to the CBJ. Because the property is municipally owned, there has been no assessment to determine its value. The structure is currently insured for \$3,403,708. In lieu of a building valuation, this figure is used as a sales estimate.⁸ The building, constructed in 1951, is 16,321 square feet and sits on a 0.25-acre lot. It sits directly across the street from the Marine Park waterfront.

⁷ However, this benefit is small enough that even if there were to be no sales tax collected on the commercial rent of these properties, the breakeven year would move by less than a year.

⁸ This figure might be high. There are six similarly sized buildings on South Franklin that are assessed at an average of \$2.8 million. Another similar property is the Bill Ray Center property located at 1108 F Street, which is a slightly larger property with more land, but located outside the city center. That property was recently listed for sale at \$2.3 million and is assessed at \$1.64 million. However, no official comparisons between these properties have been developed. A sales valuation is needed to determine the correct value.

Property Tax Collection Potential

If 155 South Seward is sold, in addition to generating \$3.4 million to defray costs of a new building, CBJ will be able to collect property tax on this location. Property tax is not currently collected because the building is municipally owned. Applying the Anchorage CPI to the property value and the current CBJ mill rate, in 37 years CBJ will potentially collect \$2.1 million in property tax if it sells the current city hall building.⁹

Table 6: Projected Property Tax Rent Advantage: 2023 to 2059

Year City Hall is Completed	Year	Sales Proceeds and Annual Property Tax Revenues from 155 South Seward Property
1	2023	\$3,440,850
2	2024	\$38,020
3	2025	\$38,919
4	2026	\$39,839
5	2027	\$40,781
6	2028	\$41,746
7	2029	\$42,733
8	2030	\$43,743
9	2031	\$44,778
10	2032	\$45,837
11	2033	\$46,920
12	2034	\$48,030
13	2035	\$49,166
14	2036	\$50,328
15	2037	\$51,518
16	2038	\$52,737
17	2039	\$53,984
18	2040	\$55,260
19	2041	\$56,567
20	2042	\$57,905
21	2043	\$59,274
22	2044	\$60,676
23	2045	\$62,111
24	2046	\$63,579
25	2047	\$65,083
26	2048	\$66,622
27	2049	\$68,197
28	2050	\$69,810
29	2051	\$71,461
30	2052	\$73,150
31	2053	\$74,880
32	2054	\$76,651
33	2055	\$78,463
34	2056	\$80,319
35	2057	\$82,218
36	2058	\$84,162
37	2059	\$86,153
37	Total	\$5.6 million

⁹ This assumes the value of the property continues to increase over time.

Reduced Operation and Maintenance Costs

One of the arguments for constructing a new city hall building is that it will be more cost-effective to maintain, saving the CBJ over the long run. Currently, energy and ownership costs are included in the rent for CBJ's four leased office spaces, and for this reason only the existing City Hall has these costs broken out. Energy efficiency measures in a new building would reduce energy and other utilities costs per square foot. However, because the new building will be larger than the current City Hall building, there are cost increases in these categories. The table below examines the current costs per square foot of the existing city hall structure and compares them with the projected per square foot costs of energy, utilities, maintenance, and custodial costs.

Table 7:
Estimated Building Operation and Maintenance Costs:
Current City Hall Versus New City Hall

Description	Current City Hall Costs 2018	Current City Hall Costs per Square Foot	New City Hall Estimated Costs Year One	New City Hall Estimated Costs per Square Foot
Custodial	\$73,709	\$4.52	\$145,407	\$3.16
Fuel Oil	\$19,955	\$1.22	\$39,366	\$0.86
Electricity	\$25,004	\$1.53	\$66,942	\$1.46
Water	\$1,026	\$0.06	\$2,458	\$0.05
Sewer	\$3,811	\$0.23	\$9,129	\$0.20
Garbage	\$1,538	\$0.09	\$4,334	\$0.09
Maintenance	\$113,773	\$6.97	\$64,126	\$1.39
Annual Operating Cost	\$238,816	\$14.64	\$331,762	\$7.22

Increased Energy Costs

According to the estimates in the above table, the per square foot energy costs are expected to decrease by 16% over the existing city hall. However, since the new building will be significantly larger, total energy costs will increase by \$61,350 to \$106,300 in the first year of the project.

Increased Ownership Costs

Custodial, water, sewage, and garbage costs are expected to increase by a combined \$81,250 annually, but again this is mostly due to the fact that these costs are included as part of the lease agreements for the four CBJ rental spaces, and these numbers are not broken out. As a whole these costs are expected to decrease by 29% per square foot in a new city hall building, in contrast to the current city hall.¹⁰

¹⁰ Note that the CBJ currently pays an additional \$26,061 to clean and maintain the current public bathrooms associated with the currently City Hall location. While these fees do not carry through to the new structure, they are also not considered to be a cost savings category once the building is sold, as CBJ will likely increase its total public restroom space to compensate. Regular janitorial costs are expected to decrease, as the CBJ is planning to contract out this task; however with the larger space of the new facility, costs were assumed to remain similar to what they are now.

Avoided Maintenance Expenditures

Once the South Seward Street building sells, the CBJ will eliminate the maintenance costs currently associated with that structure. These costs totaled \$113,773 in 2018. Table 8 below summarizes custodial, utility, energy, and maintenance costs of the two facilities.

**Table 8: Current Versus New City Hall
Operation and Maintenance Costs 2023 to 2059**

Year City Hall is Completed	Year	Current City Hall	New City Hall Projected
1	2023	\$268,420	\$331,762
2	2024	\$274,767	\$339,608
3	2025	\$281,264	\$347,638
4	2026	\$287,915	\$355,859
5	2027	\$294,724	\$364,274
6	2028	\$301,693	\$372,888
7	2029	\$308,827	\$381,706
8	2030	\$316,130	\$390,732
9	2031	\$323,606	\$399,972
10	2032	\$331,258	\$409,430
11	2033	\$339,091	\$419,112
12	2034	\$347,110	\$429,022
13	2035	\$355,318	\$439,167
14	2036	\$363,720	\$449,552
15	2037	\$372,321	\$460,183
16	2038	\$381,125	\$471,065
17	2039	\$390,138	\$482,204
18	2040	\$399,364	\$493,607
19	2041	\$408,807	\$505,279
20	2042	\$418,474	\$517,228
21	2043	\$428,370	\$529,459
22	2044	\$438,500	\$541,979
23	2045	\$448,869	\$554,795
24	2046	\$459,483	\$567,914
25	2047	\$470,349	\$581,344
26	2048	\$481,471	\$595,091
27	2049	\$492,857	\$609,163
28	2050	\$504,511	\$623,568
29	2051	\$516,441	\$638,313
30	2052	\$528,654	\$653,408
31	2053	\$541,155	\$668,859
32	2054	\$553,952	\$684,675
33	2055	\$567,051	\$700,866
34	2056	\$580,460	\$717,439
35	2057	\$594,186	\$734,405
36	2058	\$608,237	\$751,771
37	2059	\$622,620	\$769,548
37	Total	\$15.6 million	\$19.3 million

After 37 years, the CBJ will have saved \$15.6 million in avoided operation and maintenance costs by moving to a new city hall structure and spent \$19.3 million in operation and maintenance in the new city hall.

Renewal and Replacement Account Costs

Based on input from the CBJ, this analysis assumes there will be a renewal and replacement fund developed to respond to future costs on both the current and new city hall buildings. For the new city hall, savings will be set aside at a rate of 0.82%¹¹ per year of the replacement cost of the facility, which is \$20,563,000.¹² This amounts to a “cost” (set-aside) of \$168,617 in the first year to respond to future renewal and replacement needs. (See Table 10 on the following page). For the current city hall, a savings account will be developed at the same rate of 0.82% of the replacement cost of the old building of \$7.3 million.¹³ For the old city hall, year 2025 renewal and replacement costs include \$6.2 million of identified overdue deferred maintenance costs.¹⁴

Table 9: Current City Hall Deferred Maintenance Costs Identified as Needed by 2025

Cost Category	Costs
Exterior Wall System	\$ 546,131
Roof System	\$ 371,136
Interior Partitions	\$ 384,989
Interior Doors	\$ 125,767
Interior Floor Finishes	\$ 409,238
Interior Wall Finishes	\$ 158,225
Interior Ceiling Finishes	\$ 235,150
Fire Protection & Suppression	\$ 199,422
HVAC Equipment	\$ 783,832
HVAC Controls	\$ 181,922
Electrical Lighting	\$ 441,134
Special Electrical	\$ 204,161
Sub total	\$ 4,041,106
Project Mark-ups (Design, OH, Relocation Costs)	\$ 1,616,442
Escalate 2025	\$ 565,755
Total	\$ 6,223,302

The \$6.2 million amount includes \$4.04 million in direct deferred maintenance costs; \$1.6 million in project mark up costs, including design, overhead, and relocation costs; and \$565,755 in escalated costs, as projected by the CBJ.¹⁵

¹¹ The rate of 0.82% was developed by calculating the lifespan of the systems involved in a new city hall structure, including plumbing, electric, lighting, equipment, furnishings, superstructures, walls, windows, roof, doors, etc. and calculating the replacement costs.

¹² The replacement cost value was provided by the CBJ.

¹³ To determine the replacement cost for the old building, a cost per square foot of the replacement cost of the new building was calculated at \$447.31. This was applied to the current building's 16,312 square feet. Note – this differs from the projected sales value of the building discussed on page 9.

¹⁴ R&R cost projects include a major renovation in FY2025 to address deferred maintenance items. If CBJ sells the facility and moves into a new city hall, then these costs will not be incurred. However, if a new city hall is not constructed and CBJ retains the old city hall, then a significant renovation of the facility in FY2025 is anticipated. Note – it remains unclear how this deferred maintenance would impact the potential sales price of the current CBJ city hall.

¹⁵ Further explanation is provided in an email from Nathan Coffee December 21, 2018: “The replacement cost worksheet develops direct construction cost estimate for replacement of a building system. The value of the work is derived from the replacement value attributed to the building at the point of time that worksheet is developed. To develop an overall project cost a 40% mark-up is added to cover additional project costs associated with design, construction management, contingency etc. This project total is the present value project total. To arrive at a future value of the work I have escalated the costs an additional 10%.”

Table 10: Renewal and Replacement Account Costs 2023 to 2059

Year City Hall is Completed	Year	Current City Hall	New City Hall Projected
1	2023	\$59,832	\$168,617
2	2024	\$61,247	\$172,604
3	2025	\$6,285,998*	\$176,685
4	2026	\$64,178	\$180,864
5	2027	\$65,695	\$185,140
6	2028	\$67,249	\$189,518
7	2029	\$68,839	\$194,000
8	2030	\$70,467	\$198,588
9	2031	\$72,133	\$203,284
10	2032	\$73,839	\$208,091
11	2033	\$75,585	\$213,011
12	2034	\$77,372	\$218,048
13	2035	\$79,202	\$223,205
14	2036	\$81,075	\$228,483
15	2037	\$82,992	\$233,886
16	2038	\$84,955	\$239,416
17	2039	\$86,963	\$245,078
18	2040	\$89,020	\$250,873
19	2041	\$91,125	\$256,806
20	2042	\$93,280	\$262,878
21	2043	\$95,486	\$269,095
22	2044	\$97,744	\$275,458
23	2045	\$100,055	\$281,972
24	2046	\$102,421	\$288,640
25	2047	\$104,843	\$295,465
26	2048	\$107,322	\$302,452
27	2049	\$109,860	\$309,604
28	2050	\$112,458	\$316,925
29	2051	\$115,117	\$324,420
30	2052	\$117,839	\$332,091
31	2053	\$120,626	\$339,944
32	2054	\$123,478	\$347,983
33	2055	\$126,398	\$356,212
34	2056	\$129,387	\$364,635
35	2057	\$132,447	\$373,258
36	2058	\$135,579	\$382,084
37	2059	\$138,785	\$391,119
37	Total	\$ 9,700,888	\$ 9,800,431

*Note: Includes deferred maintenance costs of \$6.2 million. See previous page for a detailed explanation.

Financing

According to the detailed bond amortization schedule provided by the CBJ Director of Finance, Bob Bartholomew, the interest on the bond debt service will cost the CBJ an additional \$11.75 million over a 30-year period. The table below shows the expected payment schedule of the additional interest.

Table 11: New City Hall Financing Costs

Year City Hall is Completed	Interest Charged on Project Costs for New City Hall
1	\$598,775
2	\$592,775
3	\$586,625
4	\$580,325
5	\$571,725
6	\$562,725
7	\$553,325
8	\$541,075
9	\$528,325
10	\$514,825
11	\$500,575
12	\$485,825
13	\$470,325
14	\$454,075
15	\$436,825
16	\$418,825
17	\$399,825
18	\$379,825
19	\$359,075
20	\$337,075
21	\$314,075
22	\$289,825
23	\$264,325
24	\$237,575
25	\$209,575
26	\$180,075
27	\$147,788
28	\$113,663
29	\$77,700
30	\$39,900
31	\$0
32	\$0
33	\$0
34	\$0
35	\$0
36	\$0
37	\$0
Total	\$ 11,747,250

City Hall Construction Multiplier Effect¹⁶

The new City Hall will begin to have a local economic impact as soon as work on the building begins. One way to calculate a cost-benefit analysis is to look only at direct costs and savings, and to compare these over an extended period, such as 40 years. Another is to consider short-term spending and multiplier effects expected during design and construction of a project. The infusion of a project of this size into the local economy will have significant secondary benefits during development and construction. The project is expected to create 151 full-time jobs with \$8.3 million in associated payroll during the construction phase of the municipal facility. This includes direct, indirect, and induced jobs.

Project Costs

The fully loaded project cost to develop the new City Hall is budgeted at \$26.7 million. Because approximately \$10 million of the total costs are likely to be spent outside Juneau, the multiplier analysis includes only the \$16.8 million expected to circulate within the community.

Table 12: New City Hall Construction Cost Estimates

Cost Category	Cost
Construction Costs Expended Locally (direct)	\$10,614,616
Other Construction Costs (non local)	\$9,948,891
Additional Local Costs: Design Services, Overhead and Management (likely CBJ), Contingency (likely spent on construction), Connection Fees (AEL&P, Telecommunications), 1% for Arts, Inspections, Permits, Equipment, etc.	\$6,169,052
Total Dollars to be Spent	\$26,732,560
Total Dollars to be Spent Locally	\$16,783,669

Direct Spending Impacts

Based on the final-demand RIMS II modeling, the construction process will generate 101 direct fulltime jobs in the following industries: construction (68 jobs),

¹⁶ The project will generate the following types of economic benefits in the regional economy: **Direct Effects**. Direct benefits relate to: a) the short-term business activity of general contractors involved in the project construction, and b) the ongoing business activity of retailers and other firms involved in the development of the project. **Secondary Effects**, including indirect and induced effects: **Indirect Effects**. Indirect effects will result when local firms directly benefiting from the project in turn purchase materials, supplies or services from other firms. **Induced Effects**. Induced benefits relate to the consumption spending of employees of firms that are directly or indirectly affected by the project. These would include all of the goods and services normally associated with household consumption (e.g., housing, retail purchases, local services, etc.). The analysis quantifies the above benefits in terms of the following measures: **Total industry output** – the increase in gross industry receipts, representing the total economic activity generated by the project; **Employment** – Expressed as new full-time equivalent (FTE) jobs; and **Labor Income** – Payroll and benefits associated with the created jobs, along with additional proprietor income (payments received by self-employed individuals and unincorporated business owners).

professional services (23 jobs), and management (10 jobs). These workers are expected to earn \$6.5 million in wages during the construction and pre-construction period. Generally, these will be highly paid jobs. An additional \$10.3 million in direct output will be created by the direct spending of project dollars in the community.

Secondary Effects

A total of 46 secondary (induced and indirect) jobs with employment earnings of \$1.8 million will be created during the project's construction and design phases. Spending in Juneau would increase by \$3.8 million as the construction-related dollars circulate through the community.

**Table 13: The Economic Impact of Locally Spent Dollars
for a New City Hall Construction Project in Juneau**

Cost Category	Direct Effects	Secondary Effects	Total Effects
Employment Impact	101 jobs	46 jobs	151 jobs
Total Wages Impact (in millions)	\$6.5	\$1.8	\$8.3
Additional Local Spending Impact (in millions)	\$10.3	\$3.8	\$14.1
Total Economic Impact of Funds Spent in Juneau (in millions)	\$16.8	\$5.6	\$22.4

Source: Bureau of Economic Analysis Type II RIMS multipliers for Juneau. Produced by the Regional Product Division on 3/11/2017. Analysis by Rain Coast Data.

Additional Considerations

Consolidated Work Environment

Another value of this project will be the creation of a consolidated city hall, which will make it easier for city staff to collaborate and easier for the public to find and navigate city offices. While it is difficult to place a dollar figure on this benefit, numerous studies show the value of bringing workers together to improve functionality and capacity building. Perhaps most telling is that CBJ staff themselves appear to strongly believe that a single work location will enhance their ability to collaborate and provide quality public services, and increase workplace efficiency. Long-standing concerns of top CBJ staff include difficulty building relationships with staff who are “pocketed out” across the downtown area. There is a strong sense that centralization of staff and services would significantly improve the ability of the CBJ team to better serve the public.¹⁷

Increased Downtown Housing

Another benefit of this project is that it could increase the supply of housing in downtown Juneau. The CBJ has long been criticized for displacing housing in the Marine View apartment building, and converting desirable housing units into government office space. A shortage of housing has long been one of Juneau's most significant obstacles for economic development. The top two measures of a growing economy are an increasing

¹⁷ Source: Notes from an October 22nd, 2012 CBJ Strategic Planning Retreat.

populace and a growing job market, and in Juneau there is an artificial lid on the top of the economy in the form of housing — or lack thereof. In order for Juneau to have an economy capable of further growth, the community needs more housing. In 2018 Juneau's efficiency and one-bedroom apartments had vacancy rates of 0% and 2.9%, respectively.¹⁸ An optimal rate is generally considered to be 7%. The need for rentals in downtown Juneau is especially high, and was exacerbated by the loss of 41 units in the Gastineau Apartments, destroyed in 2012.

Juneau's visitor and legislative seasons are predominantly centered downtown. Based on a 2016 analysis, in the summer Juneau's downtown visitor industry employment grows from a low of 1,898 workers in the winter to a peak of 4,158 workers. By 2019 the number of visitors arriving by cruise ship in downtown Juneau is expected to increase by 33% over the summer of 2016, further increasing the need to house workers downtown in Juneau's summer months. Juneau's tourism season now begins in April and ends in October. There is also a need for downtown housing during the legislative season. Between January and April, approximately 250 legislators and staff come to Juneau and need housing. According to a recent Juneau Economic Development Council survey, 69% of this group stays in a long-term rental, while an additional 15% lodge in a hotel or motel.

The city currently rents 17,090 square feet of space in the Marine View building that could potentially be converted back to apartments if the CBJ were to vacate the premises. An estimated 20 new apartment units could be developed. For the purposes of this analysis it is assumed that this space will to be converted into housing from office space.¹⁹

¹⁸ Source: Alaska Department of Labor and Workforce Development, Research and Analysis Section, 2018 Alaska Rental Market Survey

¹⁹ Because this property is privately owned, there is no guarantee the owner will choose to make this conversion.

Table 14: Full Economic Model and Assumptions

Year City Hall is Completed	Year	Rent with CPI Increase	Sales Tax Rent Advantage	Mill Rate Advantage from building sale + Sale	Old City Hall R&R Fees	Current City Hall Operation and Maintenance Costs	New City Hall R&R Fees	New City Hall Operating and Maintenance Costs	Financing Costs	Total Savings	Benefits Cumulative	Total Benefits Minus Project Costs
1	2023	\$814,020	\$21,903	\$3,440,850	\$59,832	\$268,420	\$168,617	\$331,762	\$598,775	\$3,505,870	\$3,505,870	(\$23,226,690)
2	2024	\$822,160	\$22,122	\$38,020	\$61,247	\$274,767	\$172,604	\$339,608	\$592,775	\$113,329	\$3,619,198	(\$23,113,362)
3	2025	\$830,382	\$22,343	\$38,919	\$62,885	\$281,915	\$176,685	\$347,838	\$586,625	\$6,347,957	\$9,967,155	(\$16,765,405)
4	2026	\$838,685	\$22,566	\$39,839	\$64,178	\$287,915	\$180,864	\$355,859	\$580,325	\$136,136	\$10,103,291	(\$16,629,269)
5	2027	\$847,072	\$22,792	\$40,781	\$65,695	\$294,724	\$185,140	\$364,274	\$571,725	\$149,925	\$10,253,216	(\$16,479,343)
6	2028	\$855,543	\$23,020	\$41,746	\$67,249	\$301,693	\$189,518	\$372,888	\$563,325	\$164,119	\$10,417,335	(\$16,315,224)
7	2029	\$864,098	\$23,250	\$42,733	\$68,839	\$308,827	\$194,000	\$381,706	\$553,325	\$178,717	\$10,596,052	(\$16,136,508)
8	2030	\$872,739	\$23,483	\$43,743	\$70,467	\$316,130	\$198,588	\$390,732	\$541,075	\$196,168	\$10,792,220	(\$15,940,340)
9	2031	\$881,467	\$23,717	\$44,778	\$72,133	\$323,606	\$203,284	\$399,972	\$528,325	\$214,121	\$11,006,341	(\$15,726,219)
10	2032	\$890,281	\$23,955	\$45,837	\$73,839	\$331,258	\$208,091	\$409,430	\$514,825	\$232,824	\$11,239,165	(\$15,493,395)
11	2033	\$899,184	\$24,194	\$46,920	\$75,585	\$339,091	\$213,011	\$419,112	\$500,575	\$252,277	\$11,491,442	(\$15,241,118)
12	2034	\$908,176	\$24,436	\$48,030	\$77,372	\$347,110	\$218,048	\$429,022	\$485,825	\$272,229	\$11,763,671	(\$14,968,889)
13	2035	\$917,258	\$24,680	\$49,166	\$79,202	\$355,318	\$223,205	\$439,167	\$470,325	\$292,927	\$12,056,598	(\$14,675,962)
14	2036	\$926,430	\$24,927	\$50,328	\$81,075	\$363,720	\$228,483	\$449,552	\$454,075	\$314,371	\$12,370,969	(\$14,361,591)
15	2037	\$935,695	\$25,177	\$51,518	\$82,992	\$372,321	\$233,886	\$460,183	\$436,825	\$336,809	\$12,707,778	(\$14,024,782)
16	2038	\$945,052	\$25,428	\$52,737	\$84,955	\$381,125	\$239,416	\$471,065	\$418,825	\$359,990	\$13,067,768	(\$13,664,792)
17	2039	\$954,502	\$25,683	\$53,984	\$86,963	\$390,138	\$245,078	\$482,204	\$399,825	\$384,163	\$13,451,931	(\$13,280,629)
18	2040	\$964,047	\$25,939	\$55,260	\$89,020	\$399,364	\$250,873	\$493,607	\$379,825	\$409,325	\$13,861,256	(\$12,871,304)
19	2041	\$973,688	\$26,199	\$56,567	\$91,125	\$408,807	\$256,806	\$505,279	\$359,075	\$435,226	\$14,296,482	(\$12,436,078)
20	2042	\$983,425	\$26,461	\$57,905	\$93,280	\$418,474	\$262,878	\$517,228	\$337,075	\$462,363	\$14,758,845	(\$11,973,715)
21	2043	\$993,259	\$26,725	\$59,274	\$95,486	\$428,370	\$269,095	\$529,459	\$314,075	\$490,486	\$15,249,331	(\$11,483,229)
22	2044	\$1,003,191	\$26,993	\$60,676	\$97,744	\$438,500	\$275,458	\$541,979	\$289,825	\$519,841	\$15,769,172	(\$10,963,388)
23	2045	\$1,013,223	\$27,263	\$62,111	\$100,055	\$448,869	\$281,972	\$554,795	\$264,325	\$550,429	\$16,319,601	(\$10,412,959)
24	2046	\$1,023,356	\$27,535	\$63,579	\$102,421	\$459,483	\$288,640	\$567,914	\$237,575	\$582,245	\$16,901,846	(\$9,830,714)
25	2047	\$1,033,589	\$27,811	\$65,083	\$104,843	\$470,349	\$295,465	\$581,344	\$209,575	\$615,290	\$17,517,136	(\$9,215,423)
26	2048	\$1,043,925	\$28,089	\$66,622	\$107,322	\$481,471	\$302,452	\$595,091	\$180,075	\$649,811	\$18,166,947	(\$8,565,612)
27	2049	\$1,054,364	\$28,370	\$68,197	\$109,860	\$492,857	\$309,604	\$609,163	\$147,788	\$687,093	\$18,854,040	(\$7,878,520)
28	2050	\$1,064,908	\$28,653	\$69,810	\$112,458	\$504,511	\$316,925	\$623,568	\$113,663	\$736,184	\$19,580,224	(\$7,152,335)
29	2051	\$1,075,557	\$28,940	\$71,461	\$115,117	\$516,441	\$324,420	\$638,313	\$77,700	\$767,083	\$20,347,307	(\$6,385,252)
30	2052	\$1,086,313	\$29,229	\$73,150	\$117,839	\$528,654	\$332,091	\$653,408	\$39,900	\$809,786	\$21,157,094	(\$5,575,466)
31	2053	\$1,097,176	\$29,521	\$74,880	\$120,626	\$541,155	\$339,944	\$668,859	\$0	\$854,555	\$22,011,649	(\$4,720,911)
32	2054	\$1,108,147	\$29,817	\$76,651	\$123,478	\$553,952	\$347,983	\$684,675	\$0	\$859,387	\$22,871,035	(\$3,861,525)
33	2055	\$1,119,229	\$30,115	\$78,463	\$126,398	\$567,051	\$356,212	\$700,866	\$0	\$864,179	\$23,735,214	(\$2,997,346)
34	2056	\$1,130,421	\$30,416	\$80,319	\$129,387	\$580,460	\$364,635	\$717,439	\$0	\$868,929	\$24,604,143	(\$2,128,417)
35	2057	\$1,141,725	\$30,720	\$82,218	\$132,447	\$594,186	\$373,258	\$734,405	\$0	\$873,634	\$25,477,777	(\$1,254,782)
36	2058	\$1,153,143	\$31,027	\$84,162	\$135,579	\$608,237	\$382,084	\$751,771	\$0	\$878,293	\$26,356,070	(\$376,490)
37	2059	\$1,164,674	\$31,338	\$86,153	\$138,785	\$622,620	\$391,119	\$769,548	\$0	\$882,902	\$27,238,972	\$506,412
Totals		\$36,230,106	\$74,834	\$5,562,469	\$9,700,888	\$15,601,240	\$9,800,431	\$19,282,885	\$11,747,250	\$27,238,972	\$573,484,141	