Joint Information Meeting

TOWN COUNCIL & COUNTY COMMISSIONER MEETING

April 11, 2022
2:00 PM
Council Chambers
Chair: Mayor Hailey Morton Levinson

NOTICE: THE VIDEO AND AUDIO FOR THIS MEETING ARE STREAMED TO THE PUBLIC VIA THE INTERNET AND MOBILE DEVICES WITH VIEWS THAT ENCOMPASS ALL AREAS, PARTICIPANTS AND AUDIENCE MEMBERS. PLEASE SILENCE ALL ELECTRONIC DEVICES DURING THE MEETING

I. ZOOM LINK FOR PUBLIC PARTICIPATION

To join, click the link or copy to your browser: https://us02web.zoom.us/j/89477122856?pwd=ZmZFaTlXcEVDNk43Nmc0cUJWaDBXZz09
If the link does not work, join at zoom.com with Webinar ID **894 7712 2856** Password: **83001**
or join by phone **+1 346 248 7799** with Webinar ID **894 7712 2856** and Passcode: **83001**

II. CALL TO ORDER, ROLL CALL, AND ANNOUNCEMENTS

III. PUBLIC COMMENT

This section is reserved for comments on items that are not otherwise included in this agenda. Public comment is limited to 3 minutes. As a general practice, the Electeds will not hold discussion or debate these comments. Nor will they make any decisions presented during this time, but rather refer to staff for follow-up. If you would like to communicate with the Electeds during the meeting, please address them during this open public comment, when public comment is called for on a specific agenda item or send an email to council@jacksonwy.gov and commisioners@tetoncountywy.gov.

IV. CONSENT CALENDAR

A. Meeting Minutes
   1. March 7, 2022 Joint Information Meeting
   2. March 8, 2022 Special Joint Information Meeting/Retreat

V. DISCUSSION/ACTION ITEMS

A. Housing Nexus Study (April Norton, 90 mins)

B. Recreation Center Expansion (Steve Ashworth, 60 mins)

VI. MATTERS FROM COUNCIL, COMMISSIONERS AND STAFF

VII. PROPOSED ITEMS FOR FUTURE JOINT INFORMATION MEETINGS

4/25 Human Service Budget Presentations
4/25 Long Range Planning Annual Indicator Report and Work Plan (60 mins)
4/25 Housing Supply Plan and Department Work Plan (60 mins)
4/26 Joint Department Budget Presentations
5/2 Quarterly BUILD Grant Update (15 mins)
6/6 Housing Rules and Regulations Update (150 mins)
7/11 Quarterly Human Service Updates
7/11 Housing Mitigation Program Policy Direction (120 mins)
7/11 SLIB Grant Funding Application (consent)

Please note that at any point during the meeting, the Chairman or Mayor may change the order of items listed on this agenda. In order to ensure that you are present at the time your item of interest is discussed, please join the meeting at the beginning to hear any changes to the schedule or agenda.

7/11 Housing Rules and Regulations (1st reading, consent)
8/1 Quarterly BUILD Grant Update (15 mins)

VIII. ADJOURN

Please note that at any point during the meeting, the Chairman or Mayor may change the order of items listed on this agenda. In order to ensure that you are present at the time your item of interest is discussed, please join the meeting at the beginning to hear any changes to the schedule or agenda.

SPECIAL JOINT INFORMATION PROCEEDINGS – UNAPPROVED
TOWN COUNCIL AND BOARD OF COUNTY COMMISSIONERS MEETING

MARCH 7, 2022 **JACKSON, WYOMING**

The Jackson Town Council and the Teton County Board of County Commissioners met in a special joint information meeting (JIM) in the Town Council Chambers located at 150 East Pearl Avenue in Jackson. This meeting was held in-person and through the Zoom platform. Upon roll call the following were found to be present at 2:00 p.m.:

TOWN COUNCIL: Mayor Hailey Morton Levinson, Jim Rooks, Arne Jorgensen, and Jonathan Schechter. Jessica Sell Chambers was absent.

COUNTY COMMISSIONERS: Chairwoman Natalia Macker, Luther Propst, Greg Epstein, Mark Newcomb, and Mark Barron.

STAFF: Larry Pardee, Roxanne Robinson, Lea Colasuonno, Tyler Sinclair, Johnny Ziem, Paul Anthony, Tyler Valentine, Annette Langley, Floren Poliseo, Michelle Weber, April Norton, Ryan Hostetter, Carl Pelletier, Russ Ruschill, Sarah Mann, Matt Carr, Susan Scarlata, Steve Ashworth, Michael Palazzolo, Lynsey Lenamond, Riley Taylor, Alyssa Watkins, and Maureen Murphy..

PUBLIC COMMENT. No public comment.

CONSENT CALENDAR. On behalf of the Town, a motion was made by Arne Jorgensen and seconded by Jim Rooks to approve consent calendar item A as presented with the following motion. On behalf of the County, a motion was made by Mark Newcomb and seconded by Mark Barron to approve consent calendar item A as presented with the following motion. No public comment was given on the Consent Calendar.

A. **Meeting Minutes.** To approve Joint Information Meeting (JIM) minutes for the February 7, 2022 JIM and February 28, 2022 Special JIM as presented.

Mayor Morton Levinson called for the vote. The vote showed all in favor and the motion carried for the Town.

Chairwoman Macker called for the vote. The vote showed all in favor and the motion carried County.

Radio Committee Agreement & Radio Subscriber Agreement. Rich Ochs, Sarah Mann, and Steve Surwillo made staff comment. Council and Commission held discussion with staff. There was no public comment.

On behalf of the Town, a motion was made by Jim Rooks and seconded by Jonathan Schechter to approve the Agreement Establishing the Jackson Hole Public Safety Radio Committee as presented. Mayor Morton Levinson called for the vote. The vote showed all in favor and the motion carried for the Town.

On behalf of the County, a motion was made by Greg Epstein and seconded by Luther Propst to approve the Agreement Establishing the Jackson Hole Public Safety Radio Committee as presented. Chairwoman Macker called for the vote. The vote showed all in favor and the motion carried for the County.

On behalf of the Town, a motion was made by Jim Rooks and seconded by Jonathan Schechter to approve the Teton County Radio Subscriber Agreement as presented. Mayor Morton Levinson called for the vote. The vote showed all in favor and the motion carried for the Town.

On behalf of the County, a motion was made by Greg Epstein and seconded by Mark Newcomb to approve the Teton County Radio Subscriber Agreement as presented. Chairwoman Macker called for the vote. The vote showed all in favor and the motion carried for the County.

Council recessed at 2:32 p.m. and reconvened at 2:35 p.m.

Regional Housing Needs Assessment Findings Presentation. April Norton, Wendy Sullivan, and Willa Williford made staff comment. Council and Commission held discussion with staff. Jeremy Vespers, Bob Heneage, Rob Marin, and Michael Whitfield made public comment.

No motion was made.

Adjourn. On behalf of the Town, a motion was made by Jim Rooks and seconded by Jonathan Schechter to adjourn. Mayor Morton Levinson called for the vote. The vote showed all in favor and the motion carried for the Town.

On behalf of the County, a motion was made by Greg Epstein and seconded by Mark Barron to adjourn. Chairwoman Macker called for the vote. The vote showed all in favor and the motion carried for the County.

The meeting adjourned at 4:42 p.m. Minutes:rt

TOWN OF JACKSON

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Hailey Morton Levinson, Mayor

ATTEST:

____
Riley Taylor, Town Clerk

TETON COUNTY BOARD OF COUNTY COMMISSIONERS

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Natalia D. Macker, Chairwoman

ATTEST:

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Maureen E. Murphy, County Clerk

Publish JH News & Guide: March 16, 2022

TOWN COUNCIL PROCEEDINGS - UNAPPROVED

MARCH 8, 2022 **JACKSON, WYOMING**

The Jackson Town Council and Teton County Board of County Commissioners met in a special session in the Grand Room of Snow King Hotel located at 400 East Snow King Avenue in Jackson, at 9:02 A.M. This meeting was held in-person and through the Zoom platform. Upon roll call the following were found to be present:

TOWN COUNCIL: Mayor Hailey Morton Levinson, Jim Rooks, Arne Jorgensen, Jonathan Schechter, and Jessica Sell Chambers.

COUNTY COMMISSIONERS: Chairwoman Natalia Macker, Luther Propst, Greg Epstein, Mark Newcomb, and Mark Barron.

STAFF: Larry Pardee, Roxanne Robinson, Lea Colasuonno, Tyler Sinclair, Susan Scarlata, Paul Anthony, Michelle Weber, Floren Poliseo, Tyler Sinclair, Sarah Mann, Kristi Malone, Alyssa Watkins, Bruce Abel, Brady Hansen, Steve Ashworth, April Norton, Michael Palazzolo, Kelly Thompson, Carl Pelletier, Tyler Valentine, Lynsey Lenamond, and Riley Taylor.

Welcome and Agenda Review. Larry Pardee made opening remarks.

Specific Purpose Excise Tax (SPET) Discussion. Larry Pardee made staff comment. Council held discussion with staff. No motion was made.

Council recessed at 9:57 a.m. until 10:12 a.m.

Diversification of Town and County Funding. Tyler Sinclair made staff comment. Council held discussion with staff. No motion was made.

Adjourn. On behalf of the Town, a motion was made by Chambers and seconded by Schechter to adjourn. Mayor Morton Levinson called for a vote. The vote showed all in favor and the motion carried for the Town.

On behalf of the County, a motion was made by Barron and seconded by Epstein to adjourn. Chairwoman Macker called for a vote. The vote showed all in favor and the motion carried for the County. minutes: rt

TOWN OF JACKSON

ATTEST:

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Hailey Morton Levinson, Mayor

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Riley Taylor, Town Clerk

TETON COUNTY BOARD OF COUNTY COMMISSIONERS

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Natalia D. Macker, Chairwoman

ATTEST:

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Maureen E. Murphy, County Clerk

Publish JH News & Guide: March 16, 2022

BOARD OF COUNTY COMMISSIONERS

TOWN COUNCIL

JOINT INFORMATION MEETING
AGENDA DOCUMENTATION

SUBMITTING DEPARTMENT: Joint Housing **PRESENTER**: April Norton

MEETING DATE: April 11, 2022

SUBJECT: **Employee Generation by Land Use Study Presentation**

STATEMENT/PURPOSE

The Teton County Board of County Commissioners ("Board") and Jackson Town Council ("Council") will hear a presentation of the findings from the Employee Generation by Land Use Study ("Housing Nexus Study") presented by Ashleigh Kanat, lead consultant on the project.

BACKGROUND/ALTERNATIVES

The Board and Council awarded the Regional Housing Needs Assessment ("HNA") and Housing Nexus Study ("HNS") contract to WSW Consulting on June 7, 2021. The HNS evaluates the impacts of new residential and commercial development on the need for affordable workforce housing.

The HNS is not policy and does not set the housing mitigation rates for new development. The Board and Council will meet July 11, 2022 to discuss the Housing Mitigation Policy, which will be informed by the HNS.

COMPREHENSIVE PLAN ALIGNMENT

Comprehensive Plan Policy:

- Maintain a diverse population by providing workforce housing. Principle 5.1.
- Reduce the shortage of housing that is affordable to the workforce. Principle 5.3.

STAKEHOLDER ANALYSIS

A stakeholder group of seven individuals participated as part of the HNS work. They met five times to review the methodology and results and provide feedback to the consultant team. The group included: Anna Olson, Mekki Jaidi, Rob DesLauries, Tyler Davis, Josh Haney, Skye Schell, and Gavin Fine.

FISCAL IMPACT

The HNS scope of work is $107,260 and will be split evenly between the Town and County ($53,630 each).

STAFF IMPACT

This project has required significant staff time from multiple departments across the Town and County. These departments include Town & County Planning, Town Community Development, and Joint Housing.

LEGAL REVIEW

L. Colasuonno and A. Moore.

ATTACHMENTS

- Employee Generation by Land Use Study – April 2022 Draft
- PowerPoint Presentation with notes

RECOMMENDATION

No vote required.

TOWN OF JACKSON AND TETON COUNTY, WY

EMPLOYEE GENERATION/ AFFORDABLE HOUSING NEXUS STUDY

Town/County Joint Information Meeting

April 11, 2022

Economic & Planning Systems, Inc.
The Economics of Land Use

1330 Broadway, Suite 450 ▪ Oakland, California 94612
510.841.9190 ▪ www.epsys.com

AGENDA

1. Team Introductions
2. Mitigation Program Parameters and Program Goals
3. Overview of Methodology and Summary of Key Changes
4. Affordable Housing Prototype and Gap Analysis
5. Employment → Household Generation → Household Incomes
6. Summary of Maximum Mitigation Requirements
7. Summary of Key Changes
8. Feasibility Considerations and Next Steps

The nexus analysis establishes the maximum mitigation requirements and fees that can be justified through the nexus study. Often, as a matter of policy, adopted requirements/fees may be reduced. This slide previews the presentation agenda, which follows the organizational structure of the report.

MITIGATION PROGRAM PARAMETERS

- Just one tool in the toolbox; housing strategy work is underway
- Set according to "nexus logic" establishing a reasonable relationship between new development and the impacts of new development
  - Cannot be used to address existing undersupply
- One-time mitigation requirements on new development
  - Tied to land use - not necessarily the end-user (end-user can change over time)
- We have been thinking about administration/implementation all along

To set the stage, there are a number of program parameters that guided this update.

- A housing mitigation program is just one tool in the toolbox. In fact, the third phase of the overall study is the Housing Strategy work, which is kicking off later this month:
  - Kicking off on April 27th;
  - Housing stakeholder and public input through the summer;
  - Presentation in August (likely at a special meeting called in mid-August).
- The mitigation program is set according to "nexus logic." The nexus establishes a reasonable relationship between new development and the impacts of new development
  - A nexus-based mitigation program like this is forward looking; it cannot be used to address existing undersupply
- The program establishes one-time mitigation requirements on new development
  - The program is tied to land use – not necessarily the type of business or end-user (end-user can change over time). For example, the study does not distinguish between a for-profit business that occupies office space or a non-profit business that occupies office space. Rather the developer of the space is developing office space and may not know who the end-user will be.
- Please also know that we have been thinking about administration and

implementation all along. There will be a number of decisions to make about how to administer this program, but we have done our best to simplify the program.

The third phase of the overall study is the Housing Strategy work, which is kicking off later this month:

- Kicking off on April 27th;
- Housing stakeholder and public input through the summer;
- Presentation in August (likely at a special meeting called in mid-August).

NEXUS STUDY AND MITIGATION PROGRAM GOALS

1. Legal
2. Fair
3. Effective
4. Transparent
5. Updatable
6. Straight-forward to implement/administer
7. Feasible

As we started this study, we were focused on a range of objectives within the parameters described on the prior slide. The approach must be legally-defensible. It should be fair – applicants should understand the purpose of the mitigation program. It should be effective – that is, it should result in an expanded supply of housing affordable to the region's workforce. It should be transparent and updateable – we have strived wherever possible to use publicly-available data that is broadly accessible and to clearly document our methodology so that future updates can be a lighter lift for all.

Related to the point of "transparency," to support this process, we engaged a technical stakeholder group to participate. The stakeholder group was convened to:

1. Review and understand methodology and key assumptions
2. Offer technical and policy direction
3. Assist with acquiring local data and helpful research and studies

Related to point #6, the end-goal has been a program that is straight-forward and easy to administer:

1. One mitigation program/fee schedule for the Town and Teton County, WY
    - Expectation that Alta discount will remain

2. With land use categories, striving for simplicity/transparency while acknowledging key differences
    - The aggregation of retail/service/restaurant will minimize change-of-use loopholes, recognizing that we will never have perfect information about how new developments will be used and by whom
3. Current LDRs and Housing Department Rules and Reg's are in effect – for example, we worked within the context of the current LDRs, and we accepted the household income, household size, and maximum rent assumptions as provided by the Housing Department.

And, finally, we want this program to be feasible. By that, we mean that the mitigation requirements are not intended to stop or impede new, development. The nexus analysis establishes the maximum mitigation requirements and fees that can be justified through the nexus study. Often, as a matter of policy, adopted requirements/fees may be reduced. Today, we are presenting the approach, methodology, and results but we will not be getting into the recommended mitigation requirements or recommended fees.

OVERVIEW OF METHODOLOGY

SUMMARY OF KEY CHANGES (2013/2018 VS 2022)

- Aligns LDRs and mitigation program land use categories to minimize the need for "independent calculations"
- Aggregates non-residential categories (retail/service/restaurant) to reduce change-of-use concerns
- Distinguishes between single family development in Town and County and eliminates logarithmic relationship
- Expands analysis of residential impacts to include some non brick and mortar employment (using IMPLAN)
- Updates affordability gap analysis and reflects that development costs are increasing more quickly than incomes

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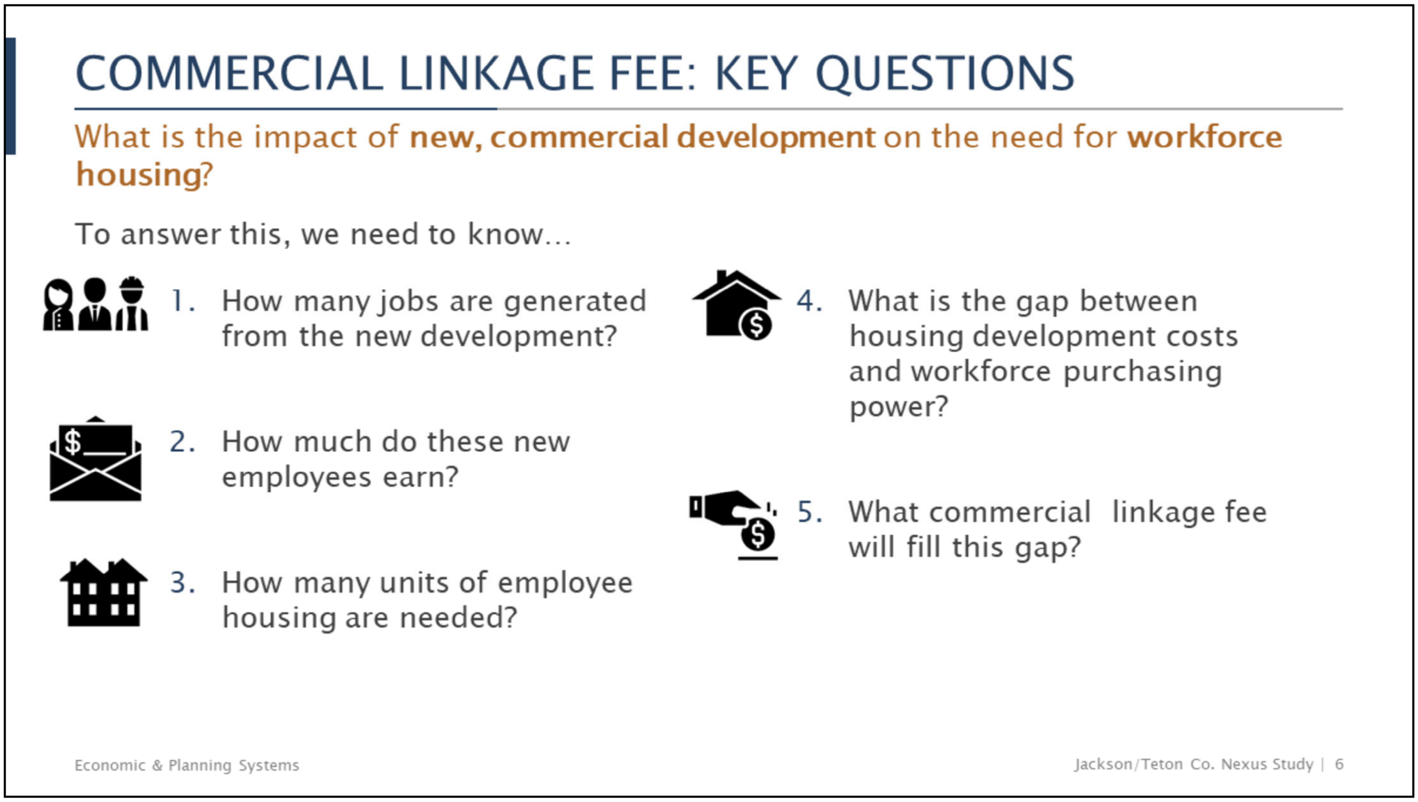
Jackson/Teton Co. Nexus Study | 5

Before we dive into the detail, this slide previews the key changes between the 2013/18 program (the current program in effect today) and the 2022 update.

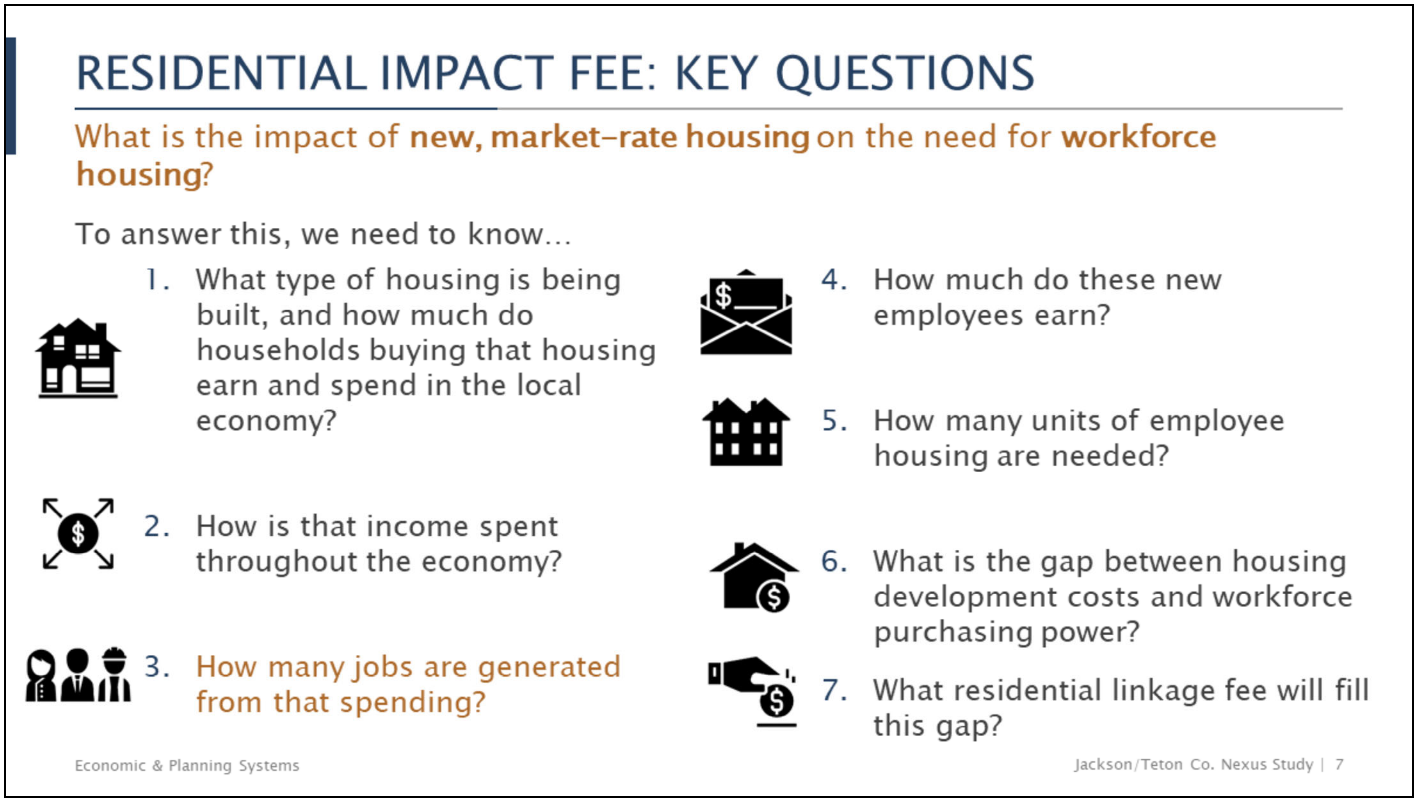
- Aligns LDRs and mitigation program land use categories to minimize the need for "independent calculations"
- Aggregates non-residential categories (retail/service/restaurant) to reduce change-of-use concerns
- Even though we had the goal of simplifying the land use categories, on the residential side, we noticed material differences between the size and price points of new, market-rate single family housing. New housing in the County is larger and people are spending more building these new homes. For this reason, the nexus study distinguishes between single family development in Town and County, which also allowed us to eliminate the logarithmic relationship.
- Expands analysis of residential impacts to include some non brick and mortar employment (using IMPLAN)
- Updates affordability gap analysis and reflects that development costs are increasing more quickly than incomes



For the nonresidential/commercial side of the program, the nexus logic is based on calculating the impact of new, commercial development on the need for workforce housing.

There are five land use categories for which this question is answered.

- Office
- Retail/service/restaurant
- Industrial
- Lodging
- Institutional/recreation/amusement



For the residential side of the program, the nexus logic is based on calculating the impact of new, market-rate housing on the need for workforce housing. One of the big shifts in this study relative to the 2013/18 update is that the analysis expands the scope of what we're considering when we evaluate the impact of new residential development. Whereas in the prior study, there was a more narrow focus on construction, home maintenance and landscaping, and EMT jobs, etc., we are now looking at all residential spending in the economy – food at home, food dining out, retail goods, and personal and professional services like hair salons and accountants. This analysis even includes spending in the economy that creates non brick & mortar jobs which is one of the things we were asked to consider in this study.

Here we are focused on two distinct land use categories:

- Multifamily
- Single family
    - Single family is further distinguished between development in the Town and development in the County.

AFFORDABILITY GAP ANALYSIS

AFFORDABLE HOUSING PROTOTYPE

- 3-Story Multifamily Building with Tuck-Under Parking

Development Program Assumptions

Density/Acre	40
Gross Unit Size	1,000
Net Unit Size	900
Number of Bedrooms	2
Occupants per 2-bedroom Unit	2
Parking Spaces/Unit	1.5

- Cost of development is about $735,000 per unit.

Development Cost Assumptions

Land/Acre	$7,000,000
Land/Unit	$175,000
Direct Costs	
Site Preparation (per Sq.Ft. of Land)	$10
Direct Construction Costs per Gross Sq.Ft.	$350
Direct Construction Costs/Unit	$350,000
Parking Construction Costs/Space	$10,000
Parking Construction Costs/Unit	$15,000
Subtotal, Direct Costs/Unit	$375,890
Indirect Costs as a % of Direct Costs	25%
Indirect Costs/Unit	$93,973
Developer Return (% of all costs)	14%
Return Amount	$90,281
Total Cost/Unit (rounded)	**$735,000**

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Jackson/Teton Co. Nexus Study | 9

Key Points:

1. The cost to develop a new unit of "affordable" multifamily housing is approximately $735,000 per door.
2. The affordable housing prototype is a multifamily building, developed at a density of 40 units/acre. The units are 900 sq.ft. and 2 bedrooms – occupied by two people and assume 1.5 parking spaces. This prototype is not a commitment in any way – it is an illustrative example of how mitigation revenue may be spent to build affordable housing in the County. It doesn't limit the type of affordable housing that can be provided; rather, it is intended to reflect an *efficient* way of developing housing.
3. In a future step (slide 12), the development cost assumptions will be used to establish the affordability gap and the mitigation fees.
   - The land value is based on a recent appraisal and related comps prepared for the Town.
   - Direct costs and the indirect cost ratio are based on average cost estimates for five projects shared by the Housing Department. The range is $265 per sq.ft. to $462 per sq.ft.
4. We heard from many of the stakeholders that costs are continuing to increase – since we assembled this data and there could be further increases between now and fee adoption.

5. It is also worth pointing out that the Housing Needs Assessment that was shared with you in March includes development cost assumptions for a market-rate multifamily condo and indicated higher development costs (nearly $850,000 per unit). The prototype shown here and used in the nexus study reflects higher-density development (40 units per acre rather than 20 units per acre) and is intended to reflect an affordable, rental development.

INCOME DEFINITIONS

- The incomes used to set the maximum rents affordable to each income cohort are at the lowest end of the defined range.

Income Category	Definition	Maximum Income (2-Person Household)	Maximum Allowed Rents
Very Low	≤50% MFI	$46,240	$694
Low	51% to ≤80% MFI	$73,984	$1,156
Median	100% MFI	$92,480	n/a
Moderate	81% MFI to ≤120% MFI	$110,976	$1,850
Workforce	120% MFI to ≤150% MFI	$138,720	$2,774

Source: Jackson/ Teton County Affordable Housing Department, United States Department of Housing and Urban Development, Economic & Planning Systems

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Jackson/Teton Co. Nexus Study | 10

Key Points:

1. This slide introduces the maximum rents that are used in our analysis - drawing the connection between income category, household income, and the maximum rents a qualifying household would be expected to pay. All of this data is provided by the Housing Department – updated each year based on HUD income limits. One note about the Workforce Category – there is not a "maximum" rent for this cohort – rather this is our calculation of what the maximum rent would be following the Housing Department guidelines. *Excerpt from Housing Dept. website: The maximum monthly rental rates for Affordable Rental Units are calculated by taking 30% of the low end of the income range and dividing by 12.*

2. We're sharing this to provide some visibility into how the maximum rents are established for each income cohort. Incomes at the lowest end of the defined range are assumed to ensure housing is affordable to every household within the category. It means that a household earning at the upper end of the defined range and earning more is paying the same rent as a similarly-sized household at the lower end.

SUPPORTABLE HOUSING COSTS

- Using the earlier income definitions, we compare development costs and supported values to calculate financial gap (or required subsidy).

	Very Low Income ≤ 50% MFI	Low Income > 50% MFI ≤ 80% MFI	Moderate Income > 80% MFI ≤ 120% MFI	Workforce > 120% MFI ≤ 150% MFI
Total Cost/Unit (rounded)	**$735,000**	**$735,000**	**$735,000**	**$735,000**
Maximum Supported Value				
Maximum Affordable Rental Rates (Annual)	$8,328	$13,872	$22,200	$33,293
(less) Operating Expenses per Unit/Year	($8,500)	($8,500)	($8,500)	($8,500)
Net Operating Income	($172)	$5,372	$13,700	$24,793
Capitalization Rate	4.5%	4.5%	4.5%	4.5%
Total Supportable Unit Value	($3,822)	$119,378	$304,444	$550,951
Affordability Gap	**$735,000**	**$615,622**	**$430,556**	**$184,049**

VL requires a subsidy to operate as well as to construct. We factor only the development subsidy into the fee calculation.

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Jackson/Teton Co. Nexus Study | 11

Here – we're bringing the prior two slides together – comparing the development cost of our affordable housing prototype to the value of the development based on maximum affordable rents by income cohort.

1. The maximum monthly rents are established by the Housing Department.
   - Very Low: $694 monthly, $8,328 annual
   - Low: $1,156 monthly, $13,872 annual
   - Moderate: $1,850 monthly, $22,200 annual
   - Workforce: $2,774 monthly, $33,293 annual
2. Annual operating expenses were provided by property managers participating in the stakeholder group.
3. As households can pay more in rent, the "value" of the unit to the developer/land owner increases, and the development subsidy decreases. More specifically, it requires less subsidy to develop housing that is affordable to a Moderate-income household than a Very Low or Low-income household.
4. The Very Low income category requires a subsidy to build AND operate.

WHY 150% OF MFI?

- Working backwards from a total development cost of $735,000 per unit requires annual income of $41,575 to justify new development or a monthly rent of $3,464.
- This rent is affordable to a household with an income of $138,583 (assuming 30% of income goes to rents).
- This household income is about 150% MFI for a 2-person household.
- At 150% MFI, a subsidy is no longer needed.

Item	Amount
Total Cost/Unit (rounded)	**$735,000**
Required Net Annual Operating Income (at 4.5% cap rate)	$33,075
Annual Operating Costs per Unit	$8,500
Required Gross Revenue	$41,575
Monthly Rent ($41,575 / 12)	$3,464
Household Income at Which Rents are Affordable	$138,583
Teton County Median Income (100% MFI for 2-person household)	$92,480
Household Income as % of Median Income	**150%**

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Jackson/Teton Co. Nexus Study | 12

Key Points:

1. While Workforce is currently defined as greater than 120% and up to 200% of Median Family Income, this analysis cuts Workforce off at 150% MFI because it's at 150% for a 2-person hh that the affordability gap goes to $0.

- Working backwards from a development value/cost of $735,000 and assuming a 4.5% capitalization rate means the required annual net operating income (from the land owner/developer perspective) is $33,075. Operating costs are assumed to be $8,500, which means gross operating income is $41,575 per year per unit, and which translates to monthly rent of $3,464 per unit.
- Assuming no more than 30% of household income should go to housing costs (rent/utilities) means that a household needs to be earning $138,583 per year to afford a monthly rent of $3,464.
- The median income for a 2-person households is $92,480 and $138,583 is 150% of $92,480.

EMPLOYMENT AND HOUSEHOLD GENERATION

COMMERCIAL EMPLOYMENT AND HH GENERATION

- The number of **jobs** is translated to the number of **employees** to account for workers holding multiple jobs. The number of **employees** is translated the number of **households** and accounts for multiple earners per household. (Jobs → Employees → Households)

Jobs per Employee is **1.16** (2018 Census LEHD)

	Office	Industrial	Retail/ Service/ Restaurant	Lodging	Institutional/ Recreation/ Amusement
Prototype Size	10,000 Sq.Ft.	10,000 Sq.Ft.	10,000 Sq.Ft.	10,000 Sq.Ft.	10,000 Sq.Ft.
Job Density (sq.ft. per job)	400	900	500	900	1,300
Total Jobs/10,000 Sq. Ft.	25	11	20	11	8
Total Employees/10,000 Sq. Ft.	22	10	17	10	7
Total Households/10,000 Sq. Ft.	**11.3**	**5.0**	**9.1**	**5.0**	**3.5**

Earners per Household with Earnings is **1.90** (2015-2019 Census ACS)

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Jackson/Teton Co. Nexus Study | 14

Key Points:

1. Here we show each of our five land use categories and assume new development of 10,000 square feet – there's nothing special about that 10,000 sq.ft. assumption other than it allows to us to conceptually work with whole people rather than fractions of people. We correct for this in a future step.
2. The job density assumptions used here are informed by national standards, the current mitigation program, the 2021 Housing Needs Assessment survey data, and stakeholder input to estimate the relationships between new development and job generation. To use office as an example, with a job density assumption of 400 sq.ft. per job, 10,000 sq.ft. of new office development is likely to support 25 jobs.
3. We then translate jobs to households. A person may hold more than one job, and on average, in Teton County, employees hold 1.16 jobs. This is Census (LEHD) data but is corroborated by the 2021 survey results.
4. On average, there are 1.9 wage earners, or employees, per household with earnings in Teton County. This is Census (ACS) data but also is corroborated by the 2021 survey results.
5. Using office as an example, 10,000 square feet of new office development will accommodate 25 jobs, or 22 unique employees. Those 22 employees will comprise 11.3 households with varying household incomes.

At this point, we have established how many working households are created, but we haven’t yet determined how many of these households will need help affording housing.

RESIDENTIAL EMPLOYMENT GENERATION

- IMPLAN generates estimate of jobs in ALL industries based on residential spending in the regional economy.

Description	Multifamily	Single Family	
		Town	County
Average Value per Unit	$976,000	$3,080,000	$6,061,000
Gross Household Income per Unit	$244,000	$800,000	$1,500,000
Less Payroll Tax Deductions	$70,679	$283,460	$558,910
Net Pay (Disposable Income)	**$173,322**	**$516,541**	**$941,091**
Total Jobs Generated (per 100 units)	**20.5**	**61.2**	**111.5**

Ratio of home value to HH income is approximately 4 : 1

Entered into IMPLAN model to generate estimate of jobs

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Let's leave commercial for the moment and switch over to residential. Here we don't necessarily have direct employment – rather we have induced employment, meaning employment that is generated by the spending of the occupants of the new housing.

- The analysis starts with the average values of newly-constructed residential development using Multiple Listing Service (MLS) data. The mitigation program needs to be forward looking about future development, but in the absence of a crystal ball, we use the trends that we see in the MLS data to help us come up with some average assumptions. We can then draw a connection between the value of the new residential unit and the household income needed to build or buy and occupy that unit. We use a home value to annual household income ratio of approximately 4 to 1. That is, a household purchasing a $400,000 home is assumed to have an annual income of at least $100,000. Or, a household that purchases a $4 million home is assumed to have an annual household income of $1M.
- The average household incomes associated with our land use categories (e.g., multifamily, single family Town, and single family County) is then entered into IMPLAN. IMPLAN is a regional economic model that processes and measures the impact of new economic activity – in our case new residential spending. We very intentionally wanted to use IMPLAN because the model helps us evaluate residential spending patterns in a more comprehensive way.
- The input that IMPLAN requires is net pay – or gross household income, adjusted

to reflect payroll tax deductions. Payroll tax amounts are estimated by an online ADP Salary Paycheck Calculator.

- IMPLAN results indicate the number of jobs induced by the household spending. For example, if you have 100 units of new single family development in the Town, the spending of those residents will induce approximately 61 jobs. Or, one new single family home in Town induces 0.6 jobs. The higher the household spending, the more jobs that are needed to support the demand for goods and services.

Note: stakeholder input indicates that the MLS data may be understating the home values and household incomes of new residential development in the County because there is new construction occurring in the County that does not transact and, therefore, does not show up in MLS data. The approach used in this analysis is conservative, in the sense it results in a lower mitigation requirement.

RESIDENTIAL HOUSEHOLD GENERATION

- Next, similar to the steps taken with commercial employment generation, we convert **jobs** generated by residential spending to **employees** and employees to **households.**

Jobs per Employee is **1.16** (2018 Census LEHD)

		Single Family	
	Multifamily	***Town***	***County[1]***
Total Jobs/100 Units	20.5	61.2	111.5
Employees/100 Units	17.8	52.9	96.4
Households/100 Units	**9.3**	**27.7**	**50.6**

[1] Excluding the Town of Jackson.

Earners per Household with Earnings is **1.90** (2015-2019 Census ACS)

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Key Points:

1. From this point forward, the steps we reviewed for the nonresidential prototypes are the same for the residential prototypes. Jobs need to be converted to employees and then to households. Both of these adjustments rely on U.S. Census data.
2. One hundred single family homes (in the Town) generate spending in the local economy that supports 61 jobs, or 53 employees. Those 53 employees will occupy 28 units of housing.

Now, just like on the commercial side, all we know at this point is how many working households are created – we haven't established how many of these households will need help with housing.

EMPLOYEE WAGES → HOUSEHOLD INCOMES

EXAMPLE: EMPLOYEE WAGE TO HOUSEHOLD INCOME

Item	Example	Source
Land Use Category	Lodging	Jackson/ Teton County and EPS
Industry	Accommodation (NAICS Code 721000)	BLS
Nationwide Average Wage for Industry	$35,733	BLS
County Average Wage for Industry	$40,106	BLS
Regional Wage Adjustment Factor for Industry	112%	BLS and EPS
Occupation Category	Buildings & Grounds Cleaning & Maintenance	BLS
Nationwide Average Income for Occupation	$27,553	BLS
County Adjusted Average Income for Occupation	$30,926	
Workers per Household with Earnings	1.90	US Census ACS
Average Income per Household	**$58,772**	BLS and EPS
Income Category for 3-Person Household	**Low Income (> 50% MFI and ≤ 80% MFI)**	Jackson/ Teton County Affordable Housing Department

1.00 **x** $30,926
+
0.9 **x** $30,926

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Key Points:

1. At this point, we know how many employees are generated by our development prototypes, but we need to figure out their incomes. **This slide walks through an illustrative example of how we calculate the household income of a maintenance worker, working in the lodging industry in Teton County.**
2. Using Bureau of Labor Statistics (BLS) data, we find the annual **wage** associated with each employee – at the national level and the County level. The average wage of an employee in the lodging sector in Teton County is 112% higher than the national average wage of an employee in the lodging sector.
3. The wage by occupation within each industry sector is only available as a national average, so we use the regional wage adjustment factor to estimate the wage by occupation in Teton County.
4. This is a single example but the analysis makes similar calculations across all industries and all occupations.
5. The household income of this employee assumes an average of 1.9 workers per household. In this example, the primary worker and the 0.9 worker are both assumed to earn $30,926 for a total household income of approximately $59,000.
6. On average in Teton County, there are 2.5 people per household. Using the income limits for a three-person household, a household with an annual income of $59,000 would qualify as a low-income household.

When this is repeated across all industries and all occupations, we are able to sort the employee households we calculated previously into income cohorts

Note: Members of the technical stakeholder group commented that current 2022 wages associated with the lodging industry are higher than shown in 2020 BLS data used in this study. Due to the study's commitment to using publicly available data and the need for data in every industry and across all occupations, BLS remains the best available source of wage data. The time lag between the BLS data and the timing of this study may not reflect recent pressures on wages.

EMPLOYEE HOUSEHOLDS TO INCOME LEVEL (NON-RES)

- Repeating this exercise for all households gives us the number of households by land use category and income level. The table below shows the income distribution of the households generated by new commercial uses.

10,000 sq.ft. of new commercial development supports this many employee households.

	Office	Industrial	Retail/ Service/ Restaurant	Lodging	Institutional/ Recreation/ Amusement
Total Households/10,000 Sq. Ft.	**11.3**	**5.0**	**9.1**	**5.0**	**3.5**
≤ 80% MFI (Very Low and Low)	3.4	1.5	4.7	1.8	1.8
> 80% MFI, ≤ 120% MFI (Moderate)	3.0	2.9	1.9	2.0	1.3
> 120% MFI, ≤ 150% MFI (Workforce)	0.8	0.3	0.4	0.7	0.1
> 150% MFI, ≤ 200% MFI (Workforce)	2.4	0.3	1.9	0.5	0.2
> 200% MFI (Workforce)	1.8	0.0	0.1	0.0	0.0

Not currently part of the fee calculation. There is no subsidy required at or above 150% MFI.

Key Points:

1. This slide picks up where slide 14 left off and shows how the number of employee households generated by our prototypical development is distributed among the Town's/County's income cohorts.
2. Our analysis shows that a development subsidy is no longer needed at 150% MFI. So, for example, in the office category, of the 11 households generated, the fee calculation addresses the households up to 150% AMI – or 7.2 households. This is the employee generation mitigation requirement.

EMPLOYEE HOUSEHOLDS TO INCOME LEVEL (RESI)

- The same exercise is done for residential uses to sort employee households into income-limited cohorts.

100 new, market-rate units induce demand for this many employee households.

	Multifamily	Single Family	
		Town	*County*[1]
Total Households	**9.3**	**27.7**	**50.6**
≤ 80% MFI (Very Low and Low)	3.4	10.1	18.3
> 80% MFI, ≤ 120% MFI (Moderate)	3.3	9.8	17.8
> 120% MFI, ≤ 150% MFI (Workforce)	0.3	0.8	1.5
> 150% MFI, ≤ 200% MFI (Workforce)	1.6	4.8	8.7
> 200% MFI (Workforce)	0.8	2.3	4.2

[1] Excluding the Town of Jackson.

Not currently part of the fee calculation. There is no subsidy required at or above 150% MFI.

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Key Points:

1. This slide picks up where slide 16 left off. The 28 employee households generated by the new development of 100 single family home are distributed across the income cohorts as shown on this slide. So, for example, in the Single Family Town category, of the 28 households generated, the fee calculation addresses the households up to 150% AMI – or 20.7 households. This is the amount of housing that should be provided in order to mitigate the impact of induced employee generation.

FEE CALCULATION

COMMERCIAL MAXIMUM FEE CALCULATION

- The number of households in each income category is multiplied by the corresponding affordability gap to arrive at the total required subsidy. The total subsidy is divided by the prototypical building square footage to calculate the maximum fee per square foot.

	Office	Industrial	Retail/ Service/ Restaurant	Lodging	Institutional/ Recreation/ Amusement
Total Required Subsidy	**$3,507,249**	**$2,263,034**	**$3,796,154**	**$2,127,937**	**$1,706,922**
Maximum Fee per 1,000 sq.ft.	$350,725	$226,303	$379,615	$212,794	$170,692
Maximum Fee per sq.ft.	**$350.72**	**$226.30**	**$379.62**	**$212.79**	**$170.69**

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Beginning at this point, the employee housing mitigation requirements interact with the gap or subsidy analysis we started with and result in a calculation of the maximum fees our analysis justifies. Again, these fees are not policy at his point.

1. The number of households in each income category is multiplied by the corresponding affordability gap associated with each income cohort to arrive at the total required subsidy.
2. The total subsidy is divided by the prototypical building square footage to calculate the maximum fee per square foot.

RESIDENTIAL MAXIMUM FEE CALCULATION

- The number of households in each income category is multiplied by the corresponding affordability gap to arrive at the total required subsidy. The total subsidy is then divided by the number of units and unit size to calculate the maximum fee per square foot.

		Single Family	
	Multifamily	*Town*	*County*[1]
Total Required Subsidy	$3,545,354	$10,566,023	$19,250,348
Number of Households/ Units	100	100	100
Maximum Fee Per Unit	$35,572	$106,013	$193,146
Average Unit Size (Sq. Ft.)	1,200	4,000	4,000
Maximum Fee per Sq.Ft.	**$29.54**	**$26.42**	**$48.13**

[1] Excluding the Town of Jackson.

Reflects average unit sizes, Countywide (MLS data)

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Key Points:

1. The number of households in each income category is multiplied by the corresponding affordability gap to arrive at the total required subsidy. The total subsidy is divided by the prototypical project size (100 units) to calculate the maximum fee per unit. To calculate the fee per square foot, the average countywide (Town + County) square footage is assumed.

SUMMARY OF MAXIMUM MITIGATION REQUIREMENTS

COMMERCIAL MITIGATION REQUIREMENTS AND FEES

The mitigation requirement is based on the number of employee households that are generated in the "up to 150% MFI" category. The mitigation fee is based on the affordability gap of those households.

	Commercial Land Use Category				
Mitigation Requirement	Office	Industrial	Retail/ Service/ Restaurant	Lodging	Institutional/ Recreation/ Amusement
Number of Affordable Units (per 1,000 sq.ft.)	0.72	0.47	0.70	0.46	0.33
Mitigation Fee (per 1,000 sq.ft.)	$350,725	$226,303	$379,615	$212,794	$170,692
Mitigation Fee (per sq.ft.)	$351	$226	$380	$213	$171

Source: Economic & Planning Systems

This slide brings it all together on the commercial side, summarizing both the onsite build mitigation requirements as well as the fee that would be charged if the other mitigation options are not viable. Let's look at office, for example. For each 1,000 square feet of new office development, 0.72 units of affordable housing are needed to mitigate the impact of that new development on the need for affordable housing in the region. That requirement is equivalent to a fee of nearly $351,000, or approximately $351 per square foot.

The variability in the mitigation requirements are due to employment density assumptions used for each land use category, the industries that are tied to each land use category, and the distribution of occupations within each industry.

As a reminder, these are the maximum-allowed mitigation requirements as established through this nexus study.

RESIDENTIAL MITIGATION REQUIREMENTS AND FEES

The mitigation requirement is based on the number of employee households that are generated in the "up to 150% MFI" category. The mitigation fee is based on the affordability gap of those households.

Mitigation Requirement	Multifamily	Single Family	
		Town	County[1]
Number of Affordable Units (per Market Rate Unit)	0.07	0.21	0.38
Mitigation Fee per Unit	$35,454	$105,660	$192,503
Average Unit Size (Sq. Ft.)	1,200	4,000	4,000
Mitigation Fee (per sq.ft. of Market Rate Development)	$29.54	$26.42	$48.13

[1] Excluding the Town of Jackson.

And this is the summary of the results on the residential side:

To walk through an example, a new single family home in Town would create spending impacts in the local economy that would induce employment growth. And to make sure those new employees have access to housing they can afford, that single family unit would need to provide 0.21 of an affordable unit or pay an equivalent fee of $26.42 per square foot.

SUMMARY OF KEY CHANGES

SUMMARY OF KEY CHANGES (2013/2018 VS 2022)

- Aligns LDRs and mitigation program land use categories to minimize the need for "independent calculations"
- Distinguishes between single family development in Town and County and eliminates logarithmic relationship
- Aggregates non-residential categories (retail/service/restaurant) to reduce change-of-use concerns
- Expands analysis of residential impacts to include some non brick and mortar employment (using IMPLAN)
- Updates affordability gap analysis and reflects that development costs are increasing more quickly than incomes

This slide is a repeat of a slide that was shown at the beginning as a reminder.

FEASIBILITY CONSIDERATIONS

NEXUS RESULTS VS. FEASIBILITY

- Nexus results indicate maximum fee/inclusionary requirement that can be adopted based on estimated demand for affordable and workforce housing generated by new development
- The nexus-based results reflect what is needed to fully mitigate impacts
- BUT, it may be that nexus-based results cannot be reasonably absorbed by new development
  - i.e., the maximum mitigation requirement/fee may render new development infeasible
- NOTE: any reduction to the maximum nexus-based requirements means that the impacts need to be addressed through alternative tools, or we will be exacerbating current conditions. There are tradeoffs to reducing the mitigation requirements.

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The nexus-based results reflect what is needed to fully mitigate impacts. We have heard from stakeholders – on a preliminary basis, that the residential requirements likely can be absorbed by new, market-rate development, but the commercial requirements reflect a significant additional cost. The goal is not to render new development infeasible, so it may be that reductions to the maximum nexus-based requirements may be necessary. At the same time, it is important to note that any reduction to the maximum requirements means that the impacts need to be addressed through alternative tools, or we will be exacerbating current conditions.

THANK YOU

QUESTIONS AND DISCUSSION

Public Review Draft Report

Commercial and Residential Employee Generation and Affordable Housing Nexus Study

The Economics of Land Use

Prepared for:
Town of Jackson and Teton County, Wyoming

Prepared by:
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List of Tables and Figures

1.0 INTRODUCTION AND EXECUTIVE SUMMARY

This Commercial and Residential Employee Generation and Affordable Housing Nexus Study (Nexus Study) documents current links between the construction of new commercial and residential development, the employees generated or induced by the development, and those employees' need for housing. In addition, the Nexus Study calculates a set of maximum commercial and residential linkage fees based on the number of new employee households generated by new development and the subsidies required to provide housing at affordable levels.

The Jackson/Teton County Housing Department defines "workforce" housing as deed-restricted housing that is affordable to working households earning between 120 percent Median Family Income (MFI) and 200 percent MFI. To be eligible for workforce housing, at least one person in the household must work full-time for a local business. "Affordable" is defined to mean that a household spends no more than 30 percent of its income on housing. Affordable homes are deed-restricted and intended to serve households earning up to 120 percent MFI.

Study Objectives

The goal of the study is to provide the Town of Jackson (Town) and Teton County (County) with a technically robust and legally defensible fee program that accurately reflects the impact of new development on the need for affordable, workforce housing. The study uses primarily publicly available and trusted data sources, tailored by local input and conditions. This approach allows for a transparent process and straightforward fee updates in the future.

Context and Rationale

The Town and County are committed to increasing the supply of stable, affordable housing for the local workforce to meet community goals related to Quality of Life, Ecosystem Stewardship, and Growth Management. The Jackson/Teton County Comprehensive Plan includes a variety of strategies to achieve this goal, including Policy 5.3.a, which recommends developers mitigate their impact on the availability of housing that is affordable to the local workforce.

The Town and County currently have a housing mitigation program, a land use tool that requires new residential and nonresidential development to provide affordable housing onsite to mitigate the impacts of the new development. In the case of an existing land use changing to a higher impact land use, the difference must be mitigated. The Town of Jackson Land Development Regulations and Teton County Land Development Regulations list the satisfactory mitigation methods, ordered by preference:

1) Build units onsite (preferred) or offsite
2) Conveyance of land
3) Utilization of banked unit
4) Deed restrict or acquire units
5) Pay mitigation fee

The current mitigation program was updated in 2018 based on employee generation numbers derived from the 2013 Employee Generation by Land Use Study conducted by Clarion Associates. The 2018 update reflected increases in regional household incomes and development costs, as well as changes to zoning in the Town of Jackson, Town and County Housing Requirements, and the rules that govern the housing program.

Summary of Key Changes from Prior Program

The evolution of the mitigation program and the key changes reflected in this 2022 study are summarized at a high-level in **Figure 1**.

Figure 1 History of the Employee Mitigation Program in Jackson/Teton County

1994

- Employee Mitigation Program established
- Inclusionary Housing requirement of 15% on new subdivision and new multifamily (subdivision and multifamily largely prohibited by zoning adopted at the same time)
- Fee ($2,400) on new single family homes on lots not mitigated at subdivision (County only)
- Linkage requirement on nonresidential to account for seasonal employees that could not afford housing (calculated at about 33% of seasonal workers in 1994)

2002

- Employee generation linkage study completed

2008

- Inclusionary requirement increased to 25%
- Fee on new residential construction on unmitigated lots updated to reflect current affordability gap (County only)
- Linkage requirement on nonresidential increased by 67% (proportional to inclusionary increase from 15% to 25%)

2013

- Comprehensive employee generation study by Clarion Associates

2018

- Introduced mitigation for year-round employees
- Updated affordability gap analysis
- Increased mitigation on nonresidential relative to residential and required direct mitigation
- Refined approach to implementation and administration of program
- Eliminated some exemptions (i.e., for non-profits and educational uses)
- Created a calculator to help developers estimate onsite mitigation requirement and fee

2022

- Aligns LDRs and mitigation program land use categories to minimize the need for "independent calculations"
- Distinguishes between single family development in Town and County and eliminates logarithmic relationship
- Aggregates non-residential categories (retail/service/restaurant) to reduce change-of-use concerns
- Expands analysis of residential impacts to include some non brick and mortar employment (using IMPLAN)
- Updates affordability gap analysis and reflects that development costs are increasing more quickly than incomes

Summary of Maximum Mitigation Requirements

This section presents a summary of the maximum mitigation requirements and fees for new or expanded commercial and residential development in the Town and County, as calculated in this nexus study. The summary results are shown in **Table 1** and

For new or expanded residential development, the mitigation requirements vary by type and location. **Appendix A** provides additional definition.

- For each new unit of market-rate **multifamily** development, the maximum-justified mitigation requirement is 0.07 units of affordable housing. The equivalent fee, on a per square foot basis, is calculated to be $29.54.
- For each new unit of market-rate **single family development in the Town**, the maximum-justified mitigation requirement is 0.21 units of affordable housing. The equivalent fee, on a per square foot basis, is calculated to be $26.42.
- For each new unit of market-rate **single family development in the County**, the maximum-justified mitigation requirement is 0.38 units of affordable housing. The equivalent fee, on a per square foot basis, is calculated to be $48.13.

Table 2. The methodology used to establish maximum justifiable fees is summarized below and described in detail in the subsequent chapters.

For new or additional commercial development, the mitigation requirements vary depending on the land use category.

- For every 1,000 square feet of new **office** development, the maximum-justified mitigation requirement is 0.72 units of affordable housing. The equivalent fee, on a per square foot basis, is calculated to be $351.
- For every 1,000 square feet of new **industrial** development, the maximum-justified mitigation requirement is 0.47 units of affordable housing. The equivalent fee, on a per square foot basis, is calculated to be $226.
- For every 1,000 square feet of new **retail, service, or restaurant** development, the maximum-justified mitigation requirement is 0.70 units of affordable housing. The equivalent fee, on a per square foot basis, is calculated to be $380.
- For every 1,000 square feet of new **lodging** development, the maximum-justified mitigation requirement is 0.46 units of affordable housing. The equivalent fee, on a per square foot basis, is calculated to be $213.
- For every 1,000 square feet of new **institutional, recreation, or amusement** development, the maximum-justified mitigation requirement is 0.33 units of affordable housing. The equivalent fee, on a per square foot basis, is calculated to be $171.

Appendix A provides a list of the land use categories used in this study and aligns each category with the Town's and County's development regulations to help define the types of uses that fall into each land use category.

Table 1 Summary of Commercial Mitigation Requirements and Maximum Fees (Town and County)

Mitigation Requirement	Commercial Land Use Category				
	Office	Industrial	Retail/ Service/ Restaurant	Lodging	Institutional/ Recreation/ Amusement
Number of Affordable Units (per 1,000 sq.ft.)	0.72	0.47	0.70	0.46	0.33
Mitigation Fee (per 1,000 sq.ft.)	$350,725	$226,303	$379,615	$212,794	$170,692
Mitigation Fee (per sq.ft.)	$351	$226	$380	$213	$171

Source: Economic & Planning Systems

For new or expanded residential development, the mitigation requirements vary by type and location. **Appendix A** provides additional definition.

- For each new unit of market-rate **multifamily** development, the maximum-justified mitigation requirement is 0.07 units of affordable housing. The equivalent fee, on a per square foot basis, is calculated to be $29.54.
- For each new unit of market-rate **single family development in the Town**, the maximum-justified mitigation requirement is 0.21 units of affordable housing. The equivalent fee, on a per square foot basis, is calculated to be $26.42.
- For each new unit of market-rate **single family development in the County**, the maximum-justified mitigation requirement is 0.38 units of affordable housing. The equivalent fee, on a per square foot basis, is calculated to be $48.13.

Table 2 Summary of Residential Mitigation Requirements and Maximum Fees

Mitigation Requirement	Multifamily [1]	Single Family [2]	
		Town	County
Number of Affordable Units (per Market Rate Unit)	0.07	0.21	0.38
Mitigation Fee (per sq.ft. of Market Rate Development)	$29.54	$26.42	$48.13

Note: To establish the per square foot fee, the market-rate unit sizes are assumed be 1,200 sq.ft. per multifamily unit and 4,000 sq.ft. per single family unit, based on recent MLS data.

Source: Economic & Planning Systems, Inc.

Maximum Fees versus Adopted Fees

While this study establishes the impacts of new development on the need for affordable housing in the region, thereby establishing the level of mitigation that is needed to fully address the identified impacts, a lower mitigation requirement or a lower fee level may be appropriate given a range of development feasibility and economic development considerations.

There are several factors compounding the issue of housing affordability; insufficient wages relative to development costs constitutes just one factor. Market forces, land use regulations, construction costs, and entitlement costs also affect housing affordability. In addition, any potential fee revenue generated through a mitigation program is just one source of potential subsidy funds to help finance affordable housing projects, as will be explored in a subsequent phase of work.

The mitigation requirements and fees calculated in this study represent the maximum fees and not necessarily adopted policy.

Summary of Methodology

The methodology for commercial and residential mitigation requirements and associated linkage fees is based on the premise that new commercial or residential development generates or induces additional worker households. The mitigation requirement specifies the number of new affordable homes that are necessary to offset or mitigate the new households generated by new development. The linkage fee is calculated to reflect the gap between how much the household can afford and the cost of developing the housing.

Commercial Nexus Methodology

As summarized in **Figure 2**, new commercial development brings in new jobs across a range of wages, which requires workers to fill those jobs. Workers need housing. The wage determines what the household can afford for housing. For many of the new worker households, there will be a gap between what the workers can afford and the cost of housing.

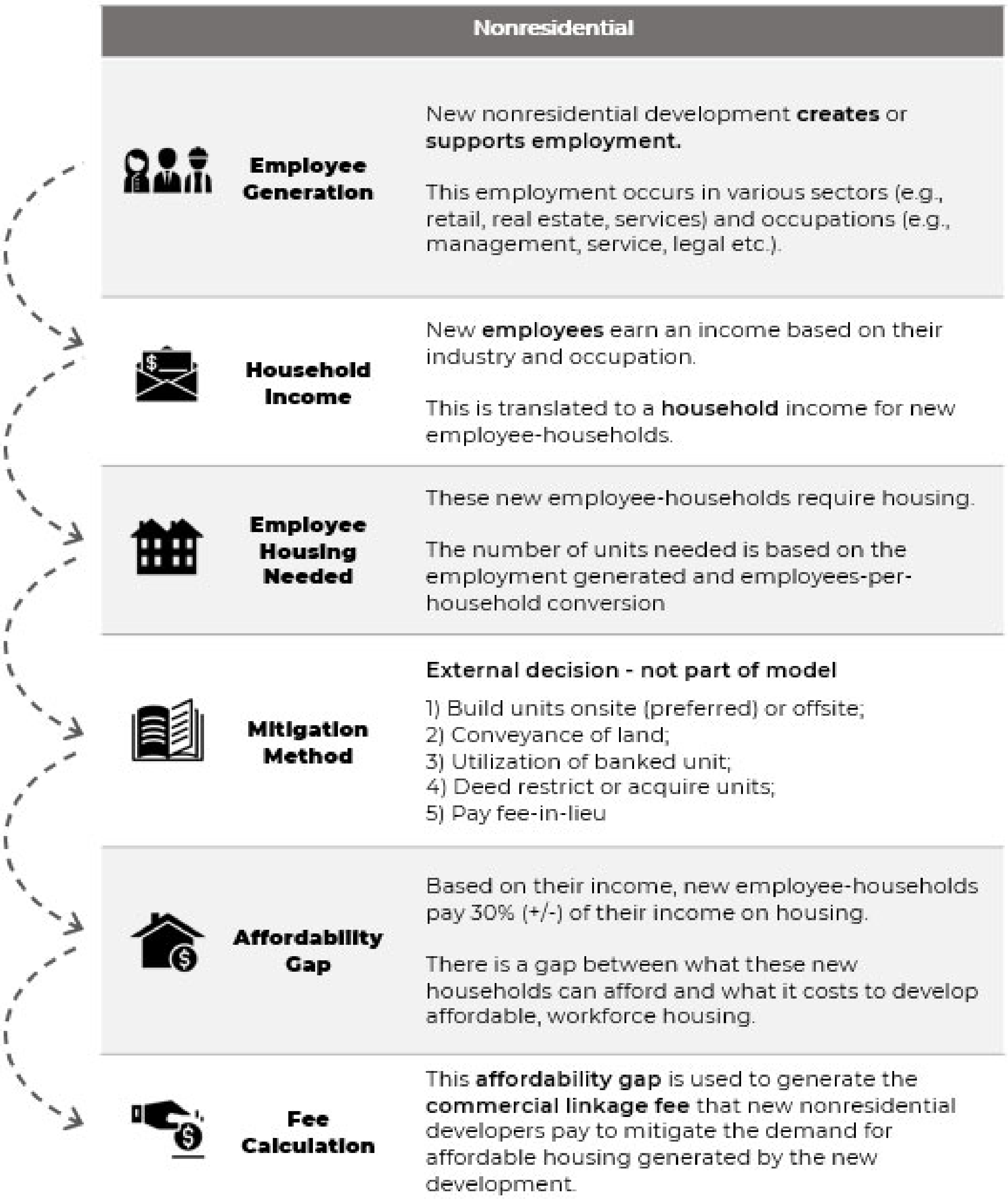
The jobs and wages generated by new commercial development are determined directly by the land use type. New Retail/Service/Restaurant, Office, or Lodging developments generate different numbers of jobs per square foot of development, and wage levels also vary by the type of industry and occupation typical in these building types. In the nexus framework, the required mitigation for land use types that generate more jobs, or lower paying jobs, will be higher than for land uses that generate fewer jobs, or higher paying jobs.

The nexus analysis uses employment density assumptions informed by national standards, the current mitigation program, the 2021 Housing Needs Assessment survey data, and input from stakeholders to estimate the relationships between new development and job generation. The steps taken in the analysis are summarized below. For a more detailed explanation of the process, refer to **Chapter 3 Commercial Employee Generation Analysis and Fee Calculation.**

Analysis Steps

- **Jobs generated by NAICS –** The analysis uses a 10,000 square foot prototype for each commercial land use. Based on assumed employment density ratios, the number of jobs created by each land use prototype is calculated. Next, the land uses and jobs are assigned North American Industrial Classification System (NAICS) codes.
- **Jobs to employees (multiple job holder adjustment) –** An adjustment is made to acknowledge that many workers have more than one job (e.g., two or more part-time jobs or a full-time and a part-time job). So as not to overestimate the number of unique *employees* generated, the number of jobs is reduced using a factor of 1.16 jobs per employee.
- **Employees by NAICS to occupation and wages –** Using the average wage by NAICS category would not yield enough detail on the spectrum of wages generated by each land use type to accurately portray household formation and income characteristics. The range of wages and occupations generated by new development is better represented by the 21 Standard Occupational Classifications defined by the Bureau of Labor Statistics (BLS). The National Industry by Occupation Matrix published by the BLS provides the estimated distribution of occupations for each NAICS category (2-Digit NAICS). Where appropriate, more detailed industries (i.e., 3-digit) are used to provide more precise information. The wages for each occupation in Teton County are estimated by indexing the wages by occupation and industry in Wyoming to the average wage in that industry for Teton County.
- **Household formation –** Another adjustment is made to account for the fact that many households are occupied by more than one earner. The additional earner also earns wages, and thus increases household income. In Teton County, there are an average of 1.9 earners per household. In this analysis, the first earner earns the wage generated from the economic impact analysis and allocation to occupations. The "second" 0.9 earners make the average wage in the same industry and occupation as the first 1.0 primary earner.
- **Tabulation of households by Median Family Income (MFI) Range –** The last step involves identifying the number of households generated in each income range. The analysis identifies all employee households generated regardless of household income, but only includes households earning up to 150 percent MFI in the mitigation calculation. The affordability gap analysis (**Chapter 2**) finds that a development subsidy is required to provide housing for households earning below 150 percent MFI, while no subsidy is required to provide housing for households earning above 150 percent MFI.

Figure 2 Commercial Employee Generation and Linkage Fee Methodology



Residential Nexus Methodology

For residential development, the same overall rationale holds except that the indirect impacts of household spending are used to determine the number of jobs. As summarized in **Figure 3**, new residential development houses residents with incomes that vary according to the price or rent of their home. These households spend disposable income on things such as retail purchases, eating out, and repair and maintenance services. This new household spending generates new jobs in the affected industries at various wages. For many workers, depending on wage and income levels, there will be a gap between what they can afford and the cost of housing.

The nexus analysis uses an economic impact model, Impact Analysis for Planning (IMPLAN), which estimates the relationships between new residential development and job generation. IMPLAN is widely used by state and federal agencies, academic researchers, and local economic development organizations to evaluate the economic impacts of proposed policies, new industries, and land use changes.

The steps taken in the analysis are summarized below. For a more detailed explanation of the process, please refer to **Chapter 4 Residential Employee Generation Analysis and Fee Calculation.**

Analysis Steps

- **Household income –** The first step in the residential nexus analysis is calculating household income of residents occupying new market-rate residential development. Using Multiple Listings Service (MLS) data, the sales prices of newly constructed homes (homes built between 2017 through 2021) in the Town of Jackson and Teton County are identified. A ratio of 4:1 is used to estimate household income based on sales prices, and assumes that monthly payments (including principle, interest, taxes, insurance and HOA dues) do not exceed 30 percent of income.
- **Jobs generated by NAICS –** The household income associated with these new households is used as an input to the IMPLAN model. IMPLAN applies an expenditure profile specific to different household income ranges and estimates the spending in the local economy and the jobs generated in the 20 major industries in the North American Industrial Classification System (NAICS).
- **Jobs to employees (multiple job holder adjustment) –** An adjustment is made to acknowledge that many employees have more than one job, such as two part time jobs or a full time and a part time job. So as not to overestimate the number of *employees* generated, the number of jobs is reduced using a factor of 1.16 jobs per employee (this is the same factor used in the commercial nexus study).
- **Employees by NAICS to occupation and wages –** The IMPLAN model provides estimates on the number of jobs by NAICS category. Using the average wage by NAICS category would not yield enough detail on the spectrum of wages generated by each land use type to accurately portray household formation and income characteristics. The range of wages and occupations generated by new development is better represented by the 21 Standard Occupational Classifications defined by the Bureau of Labor Statistics (BLS). The National Industry by Occupation Matrix published by the BLS provides the estimated distribution of occupations for each NAICS category. The wages for each occupation in Teton County are estimated by indexing the wages by occupation and industry in Wyoming to the average wage in that industry for Teton County.

Figure 3 Residential Employee Generation and Linkage Fee Methodology

Residential	
Housing Construction	New, market-rate housing (all types) is constructed. Occupants of this housing have an assumed income level, based on the cost of the home.
Resident Spending	Occupants of new housing spend money in the local economy. This spending flows through the economy across all sectors.
Employee Generation	The spending from occupants of new housing **generates employment**. This employment occurs in various sectors (e.g., retail, real estate, services) and occupations (e.g., management, service, legal etc.).
Household Income	New **employees** earn an income based on their industry and occupation. This is translated to a **household** income for new employee-households.
Employee Housing Needed	These new employee-households require housing. The number of units needed is based on the employment generated and employees-per-household conversion.
Mitigation Method	**External decision - not part of model** 1) Build units onsite (preferred) or offsite; 2) Conveyance of land; 3) Utilization of banked unit; 4) Deed restrict or acquire units; 5) Pay fee-in-lieu
Affordability Gap	New employee-households pay 30% (+/-) of their income on housing. There is a gap between what these new households can afford and what it costs to develop affordable, workforce housing.
Fee Calculation	This **affordability gap** is used to generate the **residential linkage fee** that developers of new housing pay to mitigate the demand for affordable housing generated by new occupant spending in the local economy.

- **Household formation –** Another adjustment is made to account for the fact that many households have more than one earner. This has the effect of raising the income of the employees generated from preceding steps. In Teton County, there are an average of 1.9 earners per household. In this analysis, the first earner earns the wage generated from the economic impact analysis and allocation to occupations. The "second" 0.9 earners make the average wage in the same industry and occupation as the first 1.0 primary earners.
- **Tabulation of households by MFI Range –** The last step involves identifying the number of households generated in each income range. The analysis identifies all employee households generated regardless of household income, but only includes households earning up to 150 percent MFI in the mitigation calculation. The affordability gap analysis (**Chapter 2**) finds that a development subsidy is required to provide housing for households earning below 150 percent MFI, while no subsidy is required to provide housing for households earning above 150 percent MFI.

Data Sources

To estimate the mitigation requirements and fees, EPS relied on numerous sources of data, including the following:

- U.S. Bureau of Labor Statistics (BLS)
    - Teton County jobs and wages from "2020 Quarterly Census of Employment and Wages."
    - National jobs and wages by occupation from "May 2020 Occupational Employment and Wage Statistics Research Estimates by State and Industry."
- U.S. Census Bureau American Community Survey (ACS)
    - Persons per household in Teton County from 5-Year Estimates (2015-2019).
    - Total number of workers in Teton County from 5-Year Estimates (2015-2019).
- U.S. Census Bureau Longitudinal Employer-Household Dynamics (LEHD)
    - Jobs per employee in Teton County (2019).
- Multiple Listing Service (MLS)
    - Home price data for Town of Jackson and Teton County from 2017 to 2021.
- IMPLAN
    - Comprehensive residential spending patterns and job generation, including traditional industries (e.g., housecleaning, home repair/maintenance) as well as services that may not require physical (i.e., "brick and mortar") establishments (2019).
- Jackson/Teton County Affordable Housing Department
    - Jackson/ Teton County annual income limits for FY 2021, derived from U.S. Department of Housing and Urban Development (HUD) income limits.

- Maximum affordable rents based on the annual income limits, which are the same as those used in the area's housing qualification processes.

- 2021 Regional Housing Needs Assessment Employer Survey
  - Commercial employment densities (i.e., square feet of commercial usage per job).

- Technical Stakeholder Group and Town of Jackson and County Planning Staff
  - Input received and incorporated regarding affordability levels, recently developed affordable housing projects, market assumptions, and nexus study methodology.

Organization of Report

Following this **Introduction and Executive Summary**, this study includes the following chapters:

- **Chapter 2** explains the affordability gap analysis, or the development subsidy required to provide housing that is affordable to households in each income category.
- **Chapter 3** describes the methodology used to calculate the commercial mitigation requirements and fee.
- **Chapter 4** describes the methodology used to calculate the residential mitigation requirements and fee.

2.0 AFFORDABILITY GAP ANALYSIS

For any nexus-based affordable housing fee calculation, whether residential or commercial, it is necessary to estimate the affordability gap, or the subsidy, required to construct housing units relative to the value of the units. This mitigation program targets households earning at or below 150 percent MFI because households earning less than 150 percent MFI are unable to afford the rents needed to justify the cost of new construction. Based on the following affordability gap analysis, at about 150 percent MFI, the required subsidy is reduced to $0, meaning a developer would be incentivized to build the unit.

Product Type

To estimate the development cost of a "typical" affordable unit, a development prototype is defined. The prototype is intended to represent an efficient way to develop and provide affordable housing in the region. The affordable units are assumed to be 2-bedroom, multifamily apartments, developed at a density of 40 units per acre with a mix of tuck-under and surface parking at a ratio of 1.5 parking spaces per unit. These assumptions are intended to reflect the maximum reasonable density given local land development regulations.

The Jackson/Teton County Affordable Housing Department Rules and Regulations specify that a 2-bedroom unit should be assumed to be occupied by a 2-person household, and this assumption is used in this analysis. Commonly, a 2-bedroom rental unit in the Teton County region has a gross size of about 1,000 square feet (accounting for shared lobbies, hallways, etc.) and a net size of 900 square feet.

Development Cost Assumptions

Affordable housing development costs include land costs, direct costs (e.g., labor and materials), indirect or "soft" costs (e.g., architecture/engineering, permits, and fees, etc.), and developer profit. Operating costs, including property management and maintenance as well as common utilities, and property taxes also must be incorporated into the analysis. Data from recent developments and land transactions in Teton County have been combined with stakeholder input to estimate appropriate development cost assumptions. These assumptions are shown below in **Table 3** and result in per unit development costs of $735,000. Stakeholders note that development costs are increasing rapidly and may have increased by the time mitigation fees are adopted.

Table 3 Development Prototype and Cost Assumptions

	3-Story Multifamily Building with Tuck-Under Parking			
Item	Very Low Income ≤ 50% MFI	Low Income > 50% MFI ≤ 80% MFI	Moderate Income > 80% MFI ≤ 120% MFI	Workforce > 120% MFI ≤ 150% MFI
Development Program Assumptions				
Density/Acre[1]	40	40	40	40
Gross Unit Size	1,000	1,000	1,000	1,000
Net Unit Size	900	900	900	900
Number of Bedrooms	2	2	2	2
Occupants per 2-bedroom Unit[2]	2	2	2	2
Parking Spaces/Unit	1.5	1.5	1.5	1.5
Development Cost Assumptions				
Land Cost per Acre[3]	$7,000,000	$7,000,000	$7,000,000	$7,000,000
Land Cost per Unit	$175,000	$175,000	$175,000	$175,000
Direct Costs				
Site Preparation (per Sq.Ft. of Land)	$10	$10	$10	$10
Direct Construction Costs per Gross Sq.Ft.[4]	$350	$350	$350	$350
Direct Construction Costs per Unit	$350,000	$350,000	$350,000	$350,000
Parking Construction Costs per Space	$10,000	$10,000	$10,000	$10,000
Parking Construction Costs per Unit	$15,000	$15,000	$15,000	$15,000
Subtotal, Direct Costs per Unit	$375,890	$375,890	$375,890	$375,890
Indirect Costs as a % of Direct Costs[5]	25%	25%	25%	25%
Indirect Costs/Unit	$93,973	$93,973	$93,973	$93,973
Developer Return (as % of Land, Direct, and Indirect Costs)	14%	14%	14%	14%
Return Amount	$90,281	$90,281	$90,281	$90,281
Total Cost per Unit (rounded)	**$735,000**	**$735,000**	**$735,000**	**$735,000**

[1] This prototype is most likely to be built in the Town where density can range from 35 - 50 dwelling units per acre.
[2] Assumes number of occupants is equal to the number of bedrooms, per the Jackson/Teton County Housing Department.
[3] Based on a 2021 appraisal of land value prepared for Teton County.
[4] Includes vertical construction (labor and materials), overhead and builder fees. The cost estimate reflects wood-frame construction. Parking is excluded and calculated separately.
[5] Includes costs for architecture and engineering; entitlement and fees; project management; appraisal and market study; marketing, commissions, and general administration; financing and charges; insurance; and contingency.

Sources: Town of Jackson/Teton County; Input from local residential developers; and Economic & Planning Systems

Revenue and Value Assumptions

To calculate the values of the affordable units from the perspective of the developer based on the rental revenue that each unit will generate, assumptions must be made regarding the applicable income level and the maximum allowed rent for each income cohort. In addition, translating these assumptions into unit values requires estimates of operating expenses and capitalization rates. The following assumptions were used in these calculations:

- *Income Levels*—This analysis estimates the subsidy required to develop units for two-person households earning incomes at very low, low, moderate, and workforce levels. Using the approach from Jackson/ Teton County Affordable Housing Department, maximum monthly affordable rental rates plus utilities are calculated by taking 30 percent of the low end of the income range and dividing by 12. As shown in **Table 4**, the low end of the 0 – 50 percent income range is 30 percent of the median income within that range. To determine rates for different bedroom counts in units, one person per bedroom is used. For example, a two-person household is assumed for a two-bedroom unit and a three-person household is assumed for a three-bedroom unit.

Table 4 Income Limits for Affordable Housing

Income Category	Definition	Maximum Income (2-Person Household)	Maximum Allowed Rents
Very Low	≤50% MFI	$46,240	$694
Low	51% to ≤80% MFI	$73,984	$1,156
Median [1]	100% MFI	$92,480	n/a
Moderate	81% MFI to ≤120% MFI	$110,976	$1,850
Workforce [2]	120% MFI to ≤150% MFI	$138,720	$2,774

[1] The Median Family Income for a 2-person household is provided as a reference only. Households earning the median income are included in the Moderate Income category.
[2] The Jackson/Teton County Housing Department defines "workforce" housing as deed-restricted housing that is affordable to working households earning between 120% MFI and 200% MFI. This study limits the mitigation at 150% MFI, the household income at which a development subsidy is no longer required.

Sources: Jackson/Teton County Affordable Housing Department; United States Department of Housing and Urban Development; Economic & Planning Systems.

- *Maximum Allowed Rents*—The Housing Department Rules and Regulations specify the maximum allowed monthly rents by household size for each income cohort, as shown on **Table 4**. The maximum rents assume households earn at the low end of the defined range and spend no more than 30 percent of their household income on rent and utilities. There is no maximum rent specified for workforce units, so for this analysis, EPS followed the methodology used to calculate maximum allowed rental rates described above and assumes the Workforce rental rate is based on the low end of the range at 121 percent MFI.[1]
- *Operating Costs for Rental Units*—Based on input from stakeholders, the analysis assumes that multifamily apartment operators incur annual operating costs of $8,500 per unit, which includes the cost of utilities.

[1] Current policy defines "Workforce" households as earning between 120% MFI and 200% MFI.

- *Capitalization Rates*—The capitalization rate is used to determine the current value of a property based on estimated future operating income, and is typically a measure of estimated operating risk.

Based on the preceding assumptions, **Table 5** calculates the value potential of the affordable units. The higher the rent a household can afford, the higher the value to the developer and when compared with development costs, the lower the required subsidy. The negative value for Very Low Income at ($3,822) indicates that units in that category require a subsidy not only for the construction of the unit but also for operations and maintenance. As shown, unit values range from negative $3,822 for Very Low-income units to $551,000 for Workforce units.

Table 5 Affordability Gap/Subsidy Analysis

	3-Story Multifamily Building with Tuck-Under Parking			
Item	Very Low Income ≤ 50% MFI	Low Income > 50% MFI ≤ 80% MFI	Moderate Income > 80% MFI ≤ 120% MFI	Workforce > 120% MFI ≤ 150% MFI
Total Cost/Unit (rounded)	**$735,000**	**$735,000**	**$735,000**	**$735,000**
Maximum Supported Value				
Maximum Affordable Rental Rates[1]	$8,328	$13,872	$22,200	$33,293
(less) Operating Expenses per Unit/Year[2]	($8,500)	($8,500)	($8,500)	($8,500)
Net Operating Income	($172)	$5,372	$13,700	$24,793
Capitalization Rate[3]	4.5%	4.5%	4.5%	4.5%
Total Supportable Unit Value[4]	($3,822)	$119,378	$304,444	$550,951
Affordability Gap	**$735,000**	**$615,622**	**$430,556**	**$184,049**

[1] Town/County 2021 maximum affordable rental rates in 2021. The maximum monthly rental rates for Affordable Rental Units are calculated by taking 30% of the low end of the income range and dividing by 12. The low end of the 0 - 50% income range is 30% of the median income.

[2] Operating expenses based on conversations with local rental property managers. Expenses are inclusive of utility costs.

[3] The capitalization rate is used to determine the current value of a property based on estimated future operating income, and is typically a measure of estimated operating risk.

[4] The total supportable unit value is determined by dividing the net operating income by the capitalization rate.

Sources: Town of Jackson/Teton County; Input from local residential developers; and Economic & Planning Systems, Inc.

Affordability Gap Results

Table 5 above shows the estimated gaps, or subsidies required, for construction of affordable rental units for 2-person Very Low, Low, Moderate, and Workforce households. With an average development cost of $735,000 per unit, the affordability gaps per unit are as follows:

- $735,000 for a 2-person, very low-income unit (income assumed at 30 percent of MFI)

- $616,000 for a 2-person, low-income unit (income assumed at 50 percent of MFI)
- $431,000 for a 2-person, moderate-income unit (income assumed at 80 percent of MFI)
- $184,000 for a 2-person, workforce unit (income assumed at 120 percent of MFI)

These housing affordability gaps are used to calculate the maximum-justifiable, nexus-based fees by multiplying the required subsidies by the number of units required to house workers providing goods and services to new market-rate housing development and new employees generated by new commercial development. The fee calculations are discussed in more detail in the following chapters.

It is worth noting that the affordability gaps estimated in this analysis are consistent with Housing Department Rules and Regulations but higher than they might be using other assumptions. For example, the funding gaps for low-income units assume that prices are set to be affordable to households at 50 percent of median income, while the income cohort includes households earning up to 80 percent AMI. The current approach ensures affordability even for households earning at the lower end of the income range but results in higher subsidies.

3.0 *COMMERCIAL EMPLOYEE GENERATION ANALYSIS AND FEE CALCULATION*

This chapter describes the impact that new commercial development in the Town and in the County has on the demand for affordable and workforce housing and calculates the defensible nexus-based mitigation requirements and fee levels that could be charged to commercial development. As new commercial development takes place, local employment will be generated. To the extent that these new jobs do not pay adequate wages for the employees to afford market-rate housing in the community, the new commercial development is creating a need for affordable housing. The logic is as follows:

(a) new commercial development will directly generate new jobs held by local employees;

(b) some of the employee-households will make lower incomes and will not be able to afford market-rate housing; and,

(c) mitigation requirements, including fees charged to commercial projects, can address the impact of those projects on the increased need for affordable housing.

The level of job generation varies depending on the commercial land use. In general, within a specific land use category, the number of employees needed to fill new jobs increases as the square footage increases. Thus, the fees calculated as part of this study can be applied based on the square footage of the commercial development.

Land Use Categories

The land use categories used in this Study were established with the goal of simplifying the mitigation program by aggregating land use categories to the extent possible, while staying aligned with the Town's and County's Land Development Regulations (LDRs). While most businesses clearly require certain types of spaces, others may be interchangeable as tenants may shift between building types (e.g., a personal services business locating in retail space). In this way, an aggregated land use category, such as Retail/Service/Restaurant, reduces uncertainty about the end-user.

Appendix A provides a list of the land use categories used in this study and summarizes how each land use category is aligned with the local LDRs. In general, each land use category is associated with a particular type of built space, to which the mitigation requirement or fees can be applied – not necessarily the type of business that may occupy the space and which can change over time. Note that the tax status of a business does not affect the land use category. For example, a non-profit professional services business likely fits into the "Office" category, just as for a for-profit professional services business would.

Development Prototype and Job Density Assumptions

Employment requirements vary by land use category, with some categories showing more variation than others. Industrial uses, for example, often do not require a significant number of employees but do require a significant amount of building square footage. Office space, on the other hand, may not require a significant amount of square footage, but traditionally requires a significant number of employees. The number of building square feet anticipated per worker is termed the "job density" of each land use category.

The commercial nexus analysis begins with the job generation for each land use category, using job density assumptions informed by national standards, the current mitigation program, the 2021 Housing Needs Assessment survey data, and input from stakeholders. Commercial prototypical developments and job density assumptions are summarized in **Table 6**. As shown, office has the highest job density ratio, while institutional/ recreation/ amusement has the lowest ratio. To the extent a new office use or recreation use employs people onsite and offsite (i.e., non-bricks and mortar jobs), these non-bricks and mortar jobs are partially addressed through the induced employment from new residential spending as described in the next chapter.

Potential for Overlap

In **Chapter 4**, the employee generation induced by the spending of new resident households reflects spending on goods and services at local businesses. It is theoretically possible that some of these businesses may occupy newly-constructed space, which, at the time of development, would be required to mitigate for the new employees that would work in that space. However, there is a temporal disconnect that reduces concern about potential overlap. Spending from new residents at existing businesses may require that businesses "staff up" to meet immediate demand but will not necessarily result in real-time construction of new commercial space. Rather, new commercial space is developed when developers or business owners see sustained demand and an emerging business opportunity or when the rents that a developer can achieve justify the development costs.

To further explore the likelihood of this potential overlap, the Town's development trends during the past five years were evaluated. Using the employee generation ratios calculated in this study, the job growth attributable to the new development was calculated. The employment calculated from *both* residential and nonresidential development does not explain all the employment growth that occurred in the County during the same period. This is not surprising, as new commercial development occurs in response to more than just new resident demand. New commercial development also serves increases in existing resident demand and visitor demand. At the same time, new residential spending induces demand for goods and services that may be met by employees who do not occupy bricks and mortar spaces.

During the past five years, the job growth that can be explained by new residential and commercial development accounts for 70 percent of total employment growth in the County during that same period of time. In light of this and the other identified sources of employment growth that cannot be attributed to new development, there is no technical indication that an overlap adjustment is needed.

Table 6 Commercial Prototypical Development

Description	Building Sq. Ft.	Jobs Generation	Total Jobs
Office	10,000 *sq. ft.*	**400** *sqft/job*	25.0
Industrial	10,000 *sq. ft.*	**900** *sqft/job*	11.1
Retail/ Service/ Restaurant	10,000 *sq. ft.*	**500** *sqft/job*	20.0
Lodging	10,000 *sq. ft.*	**900** *sqft/job*	11.1
Institutional/ Recreation/ Amusement	10,000 *sq. ft.*	**1,300** *sqft/job*	7.7

Source: Economic & Planning Systems

The first step is then to assign each land use type to a mix of industries. The land uses are assigned to one or more NAICS sectors as presented in U.S. Census LEHD Data. In cases where a 2-digit NAICS code is too broad to assign to a land use category, a 3-digit NAICS code is used to provide more detailed information about the industry.

Office employment is comprised of a mixture of information, financial, professional, and government services as shown in **Table 7**. Industrial employment is comprised of construction and trades, manufacturing, and transportation and warehousing firms. Lodging (including new residential development located in the short-term rental overlay zone) falls solely in the accommodations sector, and retail/service/restaurant development is in the retail trade and food services sectors. Institutional/recreation/amusement is a blend between educational, government, arts, recreation, and entertainment sectors.

Table 7 Land Use to Industry Category Conversion

	Land Use to NAICS Conversion				
Description[1]	Office	Industrial	Retail/ Service/ Restaurant	Lodging	Institutional/ Recreation/ Amusement
Industrial Sectors					
11 Ag, Forestry, Fish & Hunting	0%	3%	0%	0%	0%
21 Mining	0%	0%	0%	0%	0%
22 Utilities	0%	0%	0%	0%	0%
23 Construction	0%	73%	0%	0%	0%
31-33 Manufacturing	0%	6%	0%	0%	0%
42 Wholesale Trade	0%	0%	0%	0%	0%
44-45 Retail trade	0%	0%	51%	0%	0%
48-49 Transportation & Warehousing	0%	13%	0%	0%	0%
51 Information	4%	0%	0%	0%	0%
52 Finance & insurance	12%	0%	0%	0%	0%
53 Real estate & rental	15%	0%	0%	0%	0%
54 Professional- scientific & tech svcs	24%	0%	0%	0%	0%
55 Management of companies	1%	0%	0%	0%	0%
56 Administrative & waste services	19%	2%	0%	0%	0%
61 Educational services	0%	0%	0%	0%	18%
621 Ambulatory health care services	11%	0%	0%	0%	0%
622 Hospitals	0%	0%	0%	0%	0%
623 Nursing and residential care facilities	0%	0%	0%	0%	5%
624 Social assistance	5%	0%	0%	0%	0%
71 Arts- entertainment & recreation	0%	0%	0%	0%	52%
721 Accommodation	0%	0%	0%	100%	0%
722 Food services and drinking places	0%	0%	49%	0%	0%
811 Repair and maintenance	0%	3%	0%	0%	0%
812 Personal and laundry services	0%	0%	0%	0%	0%
813 Membership associations and organizations	4%	0%	0%	0%	0%
91-99 Government & non NAICS	5%	0%	0%	0%	25%
Total	**100%**	**100%**	**100%**	**100%**	**100%**

[1] NAICS sector 814 "Private Households" is excluded because it is not tied to commercial land uses.
Source: LEHD; Economic & Planning Systems

Household Formation

To estimate the number of households generated, the jobs must first be converted to full time employees. In today's economy and in Teton County, it is not uncommon for people to hold more than one job. Without this adjustment, the analysis would potentially overestimate the affordable housing demand created from jobs. To step down from jobs to full time employees, jobs are divided by a factor of 1.16 jobs per employee. As shown in **Table 8**, the 25 jobs generated by the office, for example, result in 21.5 full time employees after adjusting for multiple jobs holders.

Table 8 Full Time Employees Generated per 10,000 Sq. Ft. by Industry

	Employees by Land Use				
Description[1]	**Office**	**Industrial**	**Retail/ Service/ Restaurant**	**Lodging**	**Institutional/ Recreation/ Amusement**
Industrial Sectors					
11 Ag, Forestry, Fish & Hunting	0.00	0.27	0.00	0.00	0.00
21 Mining	0.00	0.02	0.00	0.00	0.00
22 Utilities	0.00	0.00	0.00	0.00	0.00
23 Construction	0.00	6.98	0.00	0.00	0.00
31-33 Manufacturing	0.00	0.59	0.00	0.00	0.00
42 Wholesale Trade	0.00	0.00	0.00	0.00	0.00
44-45 Retail trade	0.00	0.00	8.81	0.00	0.00
48-49 Transportation & Warehousing	0.00	1.21	0.00	0.00	0.00
51 Information	0.87	0.00	0.00	0.00	0.00
52 Finance & insurance	2.57	0.00	0.00	0.00	0.00
53 Real estate & rental	3.19	0.00	0.00	0.00	0.00
54 Professional- scientific & tech svcs	5.18	0.00	0.00	0.00	0.00
55 Management of companies	0.19	0.00	0.00	0.00	0.00
56 Administrative & waste services	4.15	0.21	0.00	0.00	0.00
61 Educational services	0.00	0.00	0.00	0.00	1.18
621 Ambulatory health care services	2.47	0.00	0.00	0.00	0.00
622 Hospitals	0.00	0.00	0.00	0.00	0.00
623 Nursing and residential care facilities	0.00	0.00	0.00	0.00	0.34
624 Social assistance	1.10	0.00	0.00	0.00	0.00
71 Arts- entertainment & recreation	0.00	0.00	0.00	0.00	3.43
721 Accommodation	0.00	0.00	0.00	9.58	0.00
722 Food services and drinking places	0.00	0.00	8.43	0.00	0.00
811 Repair and maintenance	0.00	0.30	0.00	0.00	0.00
812 Personal and laundry services	0.00	0.00	0.00	0.00	0.00
813 Membership associations and organizations	0.81	0.00	0.00	0.00	0.00
91-99 Government & non NAICS	1.01	0.00	0.00	0.00	1.69
Total	**21.55**	**9.58**	**17.24**	**9.58**	**6.63**

[1] NAICS sector 814 "Private Households" is excluded because it is not tied to commercial land uses.
Source: LEHD; Economic & Planning Systems

The next adjustment for estimating housing demand is to account for multiple earners per household. In other words, one new employee does not equate to demand for one new housing unit; rather, on average, there are 1.9 earners per household in Teton County. This adjustment takes the 21.5 employees generated from office development to 11.3 employee-households, and so on for each prototype as shown on **Table 9**. At this point, the total number of households includes households from all income ranges (i.e., below *and* above 150 percent MFI). The next few sections will describe how household incomes are estimated and which households require subsidized housing.

Table 9 Commercial Employment and Household Generation

Item	Office	Industrial	Retail/ Service/ Restaurant	Lodging	Institutional/ Recreation/ Amusement
Prototype Size (sq.ft.)	10,000	10,000	10,000	10,000	10,000
Employment Density (sq.ft. per job)	400	900	500	900	1,300
Total Jobs per 10,000 sq.ft.[1]	25.0	11.1	20.0	11.1	7.7
Total Employees per 10,000 sq.ft.[2]	21.5	9.6	17.2	9.6	6.6
Total Employee Households per 10,000 sq.ft.[3]	**11.3**	**5.0**	**9.1**	**5.0**	**3.5**

[1] Based on employment density assumptions informed by national standards, the current mitigation program, the 2021 Housing Needs Assessment survey data, and input from stakeholders.
[2] Based on a ratio of jobs to employee of 1.16 from 2019 U.S. Census Longitudinal Employer-Household Dynamics data.
[3] Assumes 1.9 earners per household based on 2015-2019 5-Year Estimate data from the U.S. Census American Community Survey. Includes households at all income levels (i.e., both below and above 150% MFI).

Sources: U.S. Census American Community Survey; U.S. Census Longitudinal Employer-Household Dynamics; 2021 Regional Housing Needs Assessment Employer Survey; Economic & Planning Systems.

Occupational Category and Wage Distribution

Because using the average wage for a given industry would mask the upper and lower extremes, the jobs by NAICS classification are converted to more specific occupation categories to obtain a more detailed distribution of wage levels for the new jobs. As noted in the Data Sources section, the BLS National Industry by Occupation Matrix provides the estimated distribution of occupations for each NAICS category. The wages for each occupation in Teton County are estimated by indexing the wages by occupation and industry in Wyoming to the average wage in that industry for Teton County. See **Appendix Tables # and #** for more detail on the wages and occupations.

As displayed in **Table 10**, Teton County wages roughly match or exceed national averages across almost all occupation categories. EPS applied these adjustment factors to the nationwide income level data by industry sector to estimate the wages for Teton County.

Table 10 Adjustment Factors - Converting National Wages to Teton County Wages

Industry	Average National Wage	Average Teton County Wage	County-National Wage Index
Agriculture, Forestry, Fishing & Hunting	$39,894	$36,898	0.92
Mining	$110,262	$255,275	2.32
Utilities[1]	$105,538	---	---
Construction	$67,096	$60,923	0.91
Manufacturing	$73,452	$43,427	0.59
Wholesale Trade[1]	$84,220	---	---
Retail Trade	$36,746	$44,713	1.22
Transportation and Warehousing	$56,934	$50,328	0.88
Information	$131,746	$65,701	0.50
Finance and Insurance	$121,392	$157,181	1.29
Real Estate and Rental and Leasing	$64,995	$67,677	1.04
Professional and Technical Services	$106,912	$136,921	1.28
Management of Companies and Enterprises	$132,370	$913,242	6.90
Administrative and Waste Services	$46,532	$50,148	1.08
Educational Services	$56,280	$51,872	0.92
Ambulatory health care services	$67,516	$68,753	1.02
Hospitals[1]	$70,278	---	---
Nursing and residential care facilities	$37,646	$39,661	1.05
Social Assistance	$28,753	$35,811	1.25
Arts, Entertainment, and Recreation	$44,600	$47,208	1.06
Accommodation	$35,733	$40,106	1.12
Food Services and Drinking Places	$20,961	$32,121	1.53
Repair and Maintenance	$49,118	$52,729	1.07
Personal and Laundry Services	$30,989	$35,457	1.14
Membership associations and organizations	$54,012	$66,895	1.24
Government & Non-NAICS	$70,192	$61,131	0.87
Unclassified	$66,192	$165,313	2.50

[1] Not reported by BLS

Source: Bureau of Labor Statistics, Economic & Planning Systems

EPS also used BLS nationwide data regarding industries and occupation categories to estimate the proportion of occupations likely to be represented under each employment category. For jobs generated by commercial development, top occupations are: office and administrative support; sales; food preparation and service; business and financial operations; and management.

The next step in the employee and household generation analysis is to estimate household incomes (assuming 1.9 earners per household). For purposes of this analysis, the primary earner is the IMPLAN-calculated employee and this earner is assigned the median wage in a given occupation. The second earner (the 0.9 of the 1.9 earners per household) is assumed to make the same wage as the primary earner. The resulting figure is assumed to represent the annual household income assuming workers form households with those of similar earning potential. While certainly there will be some variation in wages per employee within a household, in the absence of more specific data, this analysis assumes comparable levels of education and training among all workers in a household.

For example, EPS evaluated the occupation categories for the lodging industry to determine the proportional distribution of occupations for the employment category "Lodging." **Table 11** presents an example of this calculation, and **Appendix Table #** contains the full detail of household incomes for each occupation by industry.

Commercial Mitigation Requirements

The last step is to tabulate the employee-households at income levels of 150 percent of MFI or less. Each occupation, wage, and household income category is counted by MFI level. For 10,000 square feet of office development, there are 7.2 employee households generated that earn less than 150 percent of MFI, as shown in **Table 12**. Of the 11.3 total employee-households generated for that prototype, 63.8 percent are at incomes of 150 percent MFI or less.

In the target income ranges, industrial development generates 4.7 employee households, and retail/ service/ restaurant development generates 7.0 employee households. Lodging generates 4.6 employee households per 10,000 square feet. Institutional/ recreation/ amusement generates 3.3 employee households.

Table 11 Illustration of Employees' Household Income Calculation

Item	Example	Source
Land Use Category	Lodging	Jackson/ Teton County and EPS
Industry	Accommodation (NAICS Code 721000)	BLS
Nationwide Average Wage for Industry	$35,733	BLS
County Average Wage for Industry	$40,106	BLS
Regional Wage Adjustment Factor for Industry	112%	BLS and EPS
Occupation Category	Buildings & Grounds Cleaning & Maintenance	BLS
Nationwide Average Income for Occupation	$27,553	BLS
County Adjusted Average Income for Occupation	$30,926	
Workers per Household with Earnings	1.90	US Census ACS
Average Income per Household	**$58,772**	BLS and EPS
Income Category for 3-Person Household	**Low Income (> 50% MFI and ≤ 80% MFI)**	Jackson/ Teton County Affordable Housing Departme

Source: Bureau of Labor Statistics, U.S. Census American Community Survey, Jackson/ Teton County Affordable Housing Department, Economic & Planning Systems

Table 12 Households by MFI Generated by New Commercial Development

Households Generated per 10,000 Sq. Ft.	Office	Industrial	Retail/ Service/ Restaurant	Lodging	Institutional/ Recreation/ Amusement
Total Households Generated	**11.3**	**5.0**	**9.1**	**5.0**	**3.5**
Households by Income Range					
≤ 50% MFI (Very Low)	0.2	0.2	0.0	0.0	0.0
> 50% MFI, ≤ 80% MFI (Low)	3.3	1.3	4.7	1.8	1.8
> 80% MFI, ≤ 120% MFI (Moderate)	3.0	2.9	1.9	2.0	1.3
> 120% MFI, ≤ 150% MFI (Workforce)	0.8	0.3	0.4	0.7	0.1
Total - Target Income Ranges	**7.2**	**4.7**	**7.0**	**4.6**	**3.3**
Percent Included in Mitigation[1]	**63.8%**	**93.4%**	**77.5%**	**90.9%**	**93.8%**

[1] Includes households up to 150 percent MFI.

Source: Bureau of Labor Statistics, Jackson/ Teton Affordable Housing Department, Economic & Planning Systems

This analysis assumes that the mitigation requirements for nonresidential development will result in demand for affordable housing for all new workers generated whose households earn up to 150 percent MFI. In practice, only a portion of Teton County's workers reside in the County as many workers commute *in* to the County from other areas for a variety of reasons, one of which is the relative cost of housing among different communities. However, if every jurisdiction were to adopt a policy that it would only mitigate housing for the fraction of its locally generated workers that choose to live within the County, in aggregate, the larger region's affordable housing demand would be grossly underrepresented and underfunded.

Commercial Fee Calculation

In this section, the calculation of the commercial linkage fee is described. The affordability gap per household in each income category described in **Chapter 2** ranges from $735,000 for households earning up to 50 percent of MFI to $184,000 for households earning up to 150 percent of MFI.

The number of households generated in each income category are multiplied by the gap per household to calculate the total affordability gap generated by each prototype. **Table 13** details the number of households, affordability gap, and total gap by land use. For example, the total gap for office development is approximately $3.7 million for the 10,000 square foot prototype.

As the final step, dividing the total gap by the number of square feet results in the maximum fee amount. **Table 13** shows the maximum fees for each of the commercial land uses. The maximum commercial linkage fees range from $171 per square foot for institutional/ recreation/ amusement space to $351 per square foot for office space.

Table 13 Commercial Maximum Linkage Fee Calculation

Item		Office	Industrial	Retail/ Service/ Restaurant	Lodging	Institutional/ Recreation/ Amusement
Households by Income Range	**A**					
≤ 50% MFI (Very Low)		0.1	0.2	0.0	0.0	0.0
> 50% MFI, ≤ 80% MFI (Low)		3.3	1.3	4.7	1.8	1.8
> 80% MFI, ≤ 120% MFI (Moderate)		3.0	2.9	1.9	2.0	1.3
> 120% MFI, ≤ 150% MFI (Workforce)		0.8	0.3	0.4	0.7	0.1
Total per 10,000 Sq.Ft.		**7.2**	**4.7**	**7.0**	**4.6**	**3.3**
Gap per Household by AMI Range	**B**					
≤ 50% MFI (Very Low)		$735,000	$735,000	$735,000	$735,000	$735,000
> 50% MFI, ≤ 80% MFI (Low)		$615,622	$615,622	$615,622	$615,622	$615,622
> 80% MFI, ≤ 120% MFI (Moderate)		$430,556	$430,556	$430,556	$430,556	$430,556
> 120% MFI, ≤ 150% MFI (Workforce)		$184,049	$184,049	$184,049	$184,049	$184,049
Total Gap						
≤ 50% MFI (Very Low)		$58,976	$156,434	$0	$0	$2,819
> 50% MFI, ≤ 80% MFI (Low)		$2,016,460	$804,605	$2,889,093	$1,130,175	$1,113,125
> 80% MFI, ≤ 120% MFI (Moderate)		$1,279,536	$1,249,737	$833,036	$860,356	$563,884
> 120% MFI, ≤ 150% MFI (Workforce)		$152,277	$52,258	$74,024	$137,405	$27,094
Total	**C**	**$3,507,249**	**$2,263,034**	**$3,796,154**	**$2,127,937**	**$1,706,922**
Building Size	**D**	**10,000**	**10,000**	**10,000**	**10,000**	**10,000**
Maximum Fee per Sq. Ft.	**C / D**	**$350.72**	**$226.30**	**$379.62**	**$212.79**	**$170.69**
Maximum Fee per 1k Sq. Ft.		**$350,725**	**$350,725**	**$350,725**	**$350,725**	**$350,725**

Source: Jackson/ Teton Affordable Housing Department, Bureau of Labor Statistics, U.S. Census American Community Survey, U.S. Census Longitudinal Employer-Household Dynamics, IMPLAN, Input from local residential developers, Economic & Planning Systems

4.0 Residential Nexus Analysis

This chapter describes the impact that the development of market-rate housing in the Town and in the County has on the demand for affordable and workforce housing and calculates the defensible nexus-based mitigation requirements and fee levels that could be charged to new market-rate housing development. As new market-rate households are added to the community, local employment also will grow to provide the goods and services required by the new households. To the extent that these new jobs do not pay adequate wages for the employees to afford market-rate housing in the community, the new households' spending is creating a need for affordable housing.

The mitigation requirement and associated fee calculated in this study represents the maximum mitigation that may be charged to new market-rate housing units to address their impacts on the region's affordable housing supply. Based on subsequent policy direction, the Town and County adopted fees may be lower than the maximum fees calculated in this study. The link (or nexus) between market-rate housing and increased demand for affordable housing is as follows:

(a) residents of market-rate housing have disposable incomes and spend their money on a variety of goods and services;

(b) the provision of those goods and services will require some workers who make lower incomes and cannot afford market-rate housing; and,

(c) mitigation requirements, including fees charged to market-rate projects, can address the impact of those projects on the increased need for affordable housing.

Because more expensive market-rate housing units require owners to have higher incomes, *and* higher income households create more jobs through their spending, the nexus impacts and thus the justified mitigation requirements for new residential units vary in relation to the price of the market-rate units. The price of the unit is typically a function of its size, and the fees calculated as part of this study can be applied based on the square footage of the market-rate units.

Development Prototypes and Household Income

To estimate typical household incomes of different types of market-rate residential development, three development prototypes were modeled: new single-family homes in the Town, new single-family homes in the County, and new multifamily units. Key assumptions regarding unit size and value are based on Multiple Listings Service (MLS) data and reflect the sales prices of newly constructed homes (homes built between 2017 through 2021) in the Town of Jackson and Teton County. This data is used as an indication of future residential development patterns and potential values. Due to notable and significant differences between the sizes and values of new single family development in the Town and the County (and the presumed incomes and spending patterns of the occupants), two distinct land use categories are used in this study: Single Family Town and Single Family County.

A ratio of 4:1 is used to estimate household income based on sales prices, and assumes that monthly payments (including principle, interest, taxes, insurance and HOA dues) do not exceed 30 percent of income. The ratio of 4:1 is conservative in that it acknowledges home prices have increased more quickly than incomes since the 2013 Employee Generation Study and 2018 update, and it leaves room for interest rates to rise above current rates. These calculations are shown on **Table 14**.

- **Multifamily –** The multifamily prototype is modeled on a 1,200 square foot condominium with a value of $976,000. This requires an annual gross income of at least $244,000 to afford and results in disposable, or net (i.e., excluding payroll taxes), income of $173,000.
- **Single Family (Town) –** This prototype has a market value of $3.1 million. Residents of this home would have an annual gross household income of at least $800,000, as shown. After adjusting for payroll taxes, total annual disposable income for this prototypical household would be $517,000.
- **Single Family (County) –** These homes are located within Teton County but outside of the Town of Jackson. This prototype has a value of $6.0 million. This requires an annual gross income of at least $1.5 million to afford. After adjusting for payroll taxes, total annual disposable income for this prototypical household would be $941,000.

For each prototype the disposable household income is an input to the IMPLAN model. To avoid small decimal figures in the results, 100 units of each prototype are modeled. This does not affect the mitigation requirement or fee calculation, as a per unit adjustment is made to calculate the final mitigation requirements.

Table 14 Residential Development Prototypes

Description	Multifamily	Single Family Town	Single Family County
Average Value per Unit	$976,000	$3,080,000	$6,061,000
Gross Household Income per Unit[1]	$244,000	$800,000	$1,500,000
Minus Payroll Tax[2]			
Federal	$57,631	$257,346	$516,346
FICA	$9,114	$9,114	$9,114
Medicare	$3,934	$17,000	$33,450
State	$0	$0	$0
Total Deductions	**$70,679**	**$283,460**	**$558,910**
Net Pay (Disposable Income)	**$173,322**	**$516,541**	**$941,091**
Disposable Income per 100 Units	**$17,332,150**	**$51,654,050**	**$94,109,050**

[1] Gross household (HH) income estimated at an value to income ratio of approximately 4:1. Houshold income is used to establish household income category for IMPLAN.
[2] Payroll tax amounts estimated by ADP Salary Paycheck Calculator.

Sources: IMPLAN; MLS; ADP Salary Paycheck Calculator; Economic & Planning Systems.

Household Expenditures and Job Creation by Income Level

Having established typical income requirements for purchasing single family and multifamily homes in the region, the mitigation calculation then requires an analysis of the household spending patterns at those income levels. This section summarizes the jobs and employees generated by new residential development, based on household spending calculated in the preceding section.

The household income generated from the new households in each 100-unit prototype is input to the IMPLAN model to estimate the jobs supported by the new spending, as shown in **Table 15**. Using IMPLAN allows for a comprehensive analysis of residential spending patterns, including in traditional industries like housecleaning, home repair/maintenance, landscaping, and construction but also on services that may not require physical (i.e., "brick and mortar") establishments.

The industries with the most jobs include health care, accommodations and food services (mostly restaurants and bars); finance and insurance; and real estate (including property management). The pattern of job generation depends on the household income level. In this model, all households have a gross income greater than $200,000 per year and thus exhibit the same general spending pattern.

Table 15 Jobs by Industry Generated from Household Spending

	Jobs by Land Use (IMPLAN Results)		
Description	Multifamily	Single Family Town	Single Family County
Industrial Sectors			
11 Ag, Forestry, Fish & Hunting	0.12	0.35	0.63
21 Mining	0.00	0.01	0.02
22 Utilities	0.09	0.26	0.48
23 Construction	0.22	0.66	1.21
31-33 Manufacturing	0.05	0.16	0.29
42 Wholesale Trade	0.19	0.57	1.04
44-45 Retail trade	2.61	7.79	14.19
48-49 Transportation & Warehousing	0.29	0.86	1.56
51 Information	0.31	0.91	1.66
52 Finance & insurance	3.67	10.93	19.92
53 Real estate & rental	2.60	7.74	14.10
54 Professional- scientific & tech svcs	1.04	3.09	5.62
55 Management of companies	0.10	0.31	0.56
56 Administrative & waste services	0.74	2.21	4.02
61 Educational svcs	1.03	3.06	5.58
62 Health & social services	2.40	7.17	13.06
71 Arts- entertainment & recreation	0.70	2.10	3.82
72 Accomodation & food services	2.48	7.39	13.46
81 Other services	1.88	5.61	10.22
91-99 Government & non NAICs	0.01	0.02	0.03
Total	**20.53**	**61.18**	**111.47**

Source: IMPLAN, Economic & Planning Systems

Household Formation

To estimate the number of households generated, the jobs must first be converted to employees. In today's economy, and in Teton County in particular, it is not uncommon for people to hold more than one job. Without this adjustment, the analysis would potentially overestimate the affordable housing demand created from jobs. To step down from jobs to employees, jobs are divided by a factor of 1.16 jobs per employee. As shown in **Table 16**, the 20.5 jobs generated by the multifamily prototype, for example, results in 17.7 unique employees after adjusting for multiple jobs holders.

Table 16 Employees by Industry Generated from Household Spending

Description	Employees by Land Use		
	Multifamily	Single Family Town	Single Family County
Jobs to Employee Conversion Factor	1.16	1.16	1.16
Industrial Sectors			
11 Ag, Forestry, Fish & Hunting	0.10	0.30	0.54
21 Mining	0.00	0.01	0.02
22 Utilities	0.08	0.23	0.41
23 Construction	0.19	0.57	1.04
31-33 Manufacturing	0.05	0.14	0.25
42 Wholesale Trade	0.17	0.49	0.90
44-45 Retail trade	2.25	6.71	12.23
48-49 Transportation & Warehousing	0.25	0.74	1.34
51 Information	0.26	0.79	1.43
52 Finance & insurance	3.16	9.42	17.17
53 Real estate & rental	2.24	6.67	12.15
54 Professional- scientific & tech svcs	0.89	2.66	4.85
55 Management of companies	0.09	0.26	0.48
56 Administrative & waste services	0.64	1.90	3.47
61 Educational svcs	0.89	2.64	4.81
62 Health & social services	2.07	6.18	11.25
71 Arts- entertainment & recreation	0.61	1.81	3.30
72 Accomodation & food services	2.14	6.37	11.60
81 Other services	1.62	4.84	8.81
91-99 Government & non NAICs	0.01	0.02	0.03
Total	**17.70**	**52.74**	**96.08**

Source: IMPLAN, U.S. Census Longitudinal Employer-Household Dynamics, Economic & Planning Systems

The next adjustment for estimating housing demand is to account for multiple earners per household. In other words, one new employee does not equate to demand for one new housing unit; rather, on average, there are 1.9 earners per household in Teton County. This adjustment takes the 17.7 employees generated from multifamily development, for example, to 9.3 employee-households, and so on for each prototype as shown on **Table 17**. At this point, the total number of households includes households from all income ranges (i.e., below and above 150 percent MFI). The next few sections will describe how household incomes are estimated and which households require a subsidy to afford housing.

Table 17 Employment and Households Generated by Residential Development

Item	Multifamily	Single Family	
		Town	*County*
Jobs per 100 Units[1]	20.5	61.2	111.5
Employees per 100 Units[2]	17.8	52.9	96.4
Employee Households per 100 Units[3]	**9.3**	**27.8**	**50.7**

[1] Based on IMPLAN output, which estimates the jobs supported by new resident spending.

[2] Based on a ratio of jobs to employee of 1.16 from 2019 U.S. Census Longitudinal Employer-Household Dynamics data, reflecting that workers may hold more than one job.

[3] Assumes 1.9 earners per household based on 2015-2019 5-Year Estimate data from the U.S. Census American Community Survey. Includes households at all income levels (i.e., both below and above 150% MFI).

Sources: IMPLAN; U.S. Census American Community Survey; U.S. Census Longitudinal Employer-Household Dynamics; 2021 Regional Housing Needs Assessment Employer Survey; Economic & Planning Systems.

Occupational Category and Wage Distribution

Because using the average wage for a given industry would mask the upper and lower extremes, the jobs by NAICS classification are converted to more specific occupation categories to obtain a more detailed distribution of wage levels for the new jobs. As noted in the Data section, the BLS National Industry by Occupation Matrix provides the estimated distribution of occupations for each NAICS category. The wages for each occupation in Teton County are estimated by indexing the wages by occupation and industry in Wyoming to the average wage in that industry for Teton County.

As displayed in **Table 18**, Teton County wages roughly match or exceed national averages across almost all occupation categories. EPS applied these adjustment factors to the nationwide income level data by industry sector to estimate the wages for Teton County. See **Appendix Tables # and #** for more detail on the wages and occupations.

Table 18 Adjustment Factors - Converting National Wages to Teton County Wages

Industry	Average National Wage	Average Teton County Wage	County-National Wage Index
Total, All Industries	$64,021	$59,927	0.94
Agriculture, Forestry, Fishing & Hunting	$39,894	$36,898	0.92
Mining	$110,262	$255,275	2.32
Utilities[1]	$105,538	---	---
Construction	$67,096	$60,923	0.91
Manufacturing	$73,452	$43,427	0.59
Wholesale Trade[1]	$84,220	---	---
Retail Trade	$36,746	$44,713	1.22
Transportation and Warehousing	$56,934	$50,328	0.88
Information	$131,746	$65,701	0.50
Finance and Insurance	$121,392	$157,181	1.29
Real Estate and Rental and Leasing	$64,995	$67,677	1.04
Professional and Technical Services	$106,912	$136,921	1.28
Management of Companies and Enterprises	$132,370	$913,242	6.90
Administrative and Waste Services	$46,532	$50,148	1.08
Educational Services	$56,280	$51,872	0.92
Health Care and Social Assistance	$56,330	$56,336	1.00
Arts, Entertainment, and Recreation	$44,600	$47,208	1.06
Accommodation and Food Services	$22,918	$37,536	1.64
Other Services, Ex. Public Admin	$44,142	$50,087	1.13
Government & Non-NAICS	$70,192	$61,131	0.87
Unclassified	$66,192	$165,313	2.50

[1] Not reported by BLS

Source: Bureau of Labor Statistics, Economic & Planning Systems

EPS also used BLS nationwide data regarding industries and occupation categories to estimate the proportion of occupations likely to be represented under each employment category. For jobs generated by commercial development, top occupations are office and administrative support; sales; food preparation and service; business and financial operations; and management.

The next step in the employee and household generation analysis is to estimate household incomes (assuming 1.9 earners per household). For purposes of this analysis, the primary earner is the IMPLAN-calculated employee and this earner is assigned the median wage in a given occupation. The second earner (the 0.9 of the 1.9 earners per household) is assumed to make the same wage as the primary earner. The resulting figure is assumed to represent the annual household income assuming workers form households with those of similar earning potential. While certainly there will be some variation in wages per employee within a household, in the absence of more specific data, this analysis assumes comparable levels of education and training among all workers in a household.

For example, EPS evaluated the occupation categories for the lodging industry to determine the proportional distribution of occupations for the employment category "Lodging." **Table 19** presents an example of this calculation, and **Appendix Table #** contains the full detail of household incomes for each occupation by industry.

Table 19 Illustration of Employees' Household Income Calculation

Item	Example	Source
Land Use Category	Lodging	Jackson/ Teton County and EPS
Industry	Accommodation (NAICS Code 721000)	BLS
Nationwide Average Wage for Industry	$35,733	BLS
County Average Wage for Industry	$40,106	BLS
Regional Wage Adjustment Factor for Industry	112%	BLS and EPS
Occupation Category	Buildings & Grounds Cleaning & Maintenance	BLS
Nationwide Average Income for Occupation	$27,553	BLS
County Adjusted Average Income for Occupation	$30,926	
Workers per Household with Earnings	1.90	US Census ACS
Average Income per Household	**$58,772**	BLS and EPS
Income Category for 3-Person Household	**Low Income (> 50% MFI and ≤ 80% MFI)**	Jackson/ Teton County Affordable Housing Department

Source: Bureau of Labor Statistics, U.S. Census American Community Survey, Jackson/ Teton County Affordable Housing Department, Economic & Planning Systems

Residential Mitigation Requirements

The last step is to tabulate the employee-households at income levels of 150 percent MFI or less. For 100 units of multifamily development, there are 6.9 employee households generated that earn less than 150 percent of MFI, as shown in **Table 20**. Of the 9.3 total employee-households generated for that prototype, 74.4 percent are at incomes of 150 percent MFI or less.

The total number of employee households required to support the expenditures of new market-rate units and requiring subsidized housing is summarized below.

Table 20 Households by MFI Generated by New Household Spending

Households Generated per 100 Units	Multifamily	Single Family Town	Single Family County
Total Households Generated	**9.3**	**27.7**	**50.6**
Target Income Range			
≤ 50% MFI (Very Low)	0.0	0.1	0.2
> 50% MFI, ≤ 80% MFI (Low)	3.3	9.9	18.1
> 80% MFI, ≤ 120% MFI (Moderate)	3.3	9.8	17.8
> 120% MFI, ≤ 150% MFI (Workforce)	0.3	0.8	1.5
Total - Target Income Ranges	**6.9**	**20.6**	**37.6**
Percent Included in Mitigation[1]	**74.4%**	**74.4%**	**74.4%**

[1] Includes households up to 150 percent MFI.

Source: Bureau of Labor Statistics, Jackson/ Teton Affordable Housing Department, Economic & Planning Systems

Residential Fee Calculation

The affordability gap analysis quantifies the subsidy required to construct affordable housing at various income levels. Analysis of residential expenditures in the local economy that rely on lower wage workers provides an estimate of the total number of income-qualified households generated by new residential development. The number of households generated in each MFI category are multiplied by the gap per household to calculate the total affordability gap generated by each prototype. The total gap for multifamily is therefore $3.5 million per 100 units, or $35,000 for each new unit of market rate multifamily housing. The average size of a newly constructed multifamily condominium in the region is 1,200 square feet based on MLS data, which results in a per square foot maximum fee of $29.54. For single-family development in the region, the average size of newly constructed homes is 4,000 square feet. In the Town, the maximum mitigation fee is $26.42 per square foot, and in the County, the maximum mitigation fee is $48.13 per square foot.

Table 21 Residential Maximum Fee Calculation

Item		Multifamily	Single Family Town	Single Family County
Households Generated (per 100 units)	**A**			
≤ 50% MFI (Very Low)		0.0	0.1	0.2
> 50% MFI, ≤ 80% MFI (Low)		3.3	9.9	18.1
> 80% MFI, ≤ 120% MFI (Moderate)		3.3	9.8	17.8
> 120% MFI, ≤ 150% MFI (Workforce)		0.3	0.8	1.5
Total per 100 Units		**6.9**	**20.6**	**37.6**
Gap per Household by AMI Range	**B**			
≤ 50% MFI (Very Low)		$735,000	$735,000	$735,000
> 50% MFI, ≤ 80% MFI (Low)		$615,622	$615,622	$615,622
> 80% MFI, ≤ 120% MFI (Moderate)		$430,556	$430,556	$430,556
> 120% MFI, ≤ 150% MFI (Workforce)		$184,049	$184,049	$184,049
Total Gap				
≤ 50% MFI (Very Low)	**A X B**	$30,079	$89,644	$163,324
> 50% MFI, ≤ 80% MFI (Low)		$2,054,754	$6,123,671	$11,156,780
> 80% MFI, ≤ 120% MFI (Moderate)		$1,411,256	$4,205,889	$7,662,753
> 120% MFI, ≤ 150% MFI (Workforce)		$49,264	$146,819	$267,491
Total	**C**	**$3,545,354**	**$10,566,023**	**$19,250,348**
Number of Units	**D**	**100**	**100**	**100**
Average Prototype Unit Size	**E**	**1,200**	**4,000**	**4,000**
Maximum Fee per Sq. Ft.	**C / D / E**	**$29.54**	**$26.42**	**$48.13**

Sources: Jackson/ Teton Affordable Housing Department, Bureau of Labor Statistics, U.S. Census American Community Survey, U.S. Census Longitudinal Employer-Household Dynamics, IMPLAN, Input from local residential developers, Economic & Planning Systems.

ACKNOWLEDGEMENTS

EPS would like to acknowledge the larger team that helped with this study, whether through technical support, or policy direction, or historical memory and continuity. Thank you!

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Special Thanks to

Alex Norton OPS Strategies - for his patience and willingness to discuss ALL the details.

Wendy Sullivan WSW Consulting – for inviting EPS to be part of her team.

APPENDICES:

Appendix A: Land Use Definitions

Appendix B: Occupation Distribution by Employment Category

Appendix A:

Land Use Definitions

Appendix Table A-1
Land Use Category Descriptions
Town of Jackson/Teton County, WY; EPS #211030

Land Use Category	NAICS Codes	IMPLAN Codes	Current LDRs (Town)	Current LDRs (County)	Description and "Business Type" Examples
Residential					
Single Family, Town			Detached Single Family Unit (6.1.4.B.)	Detached Single Family Unit (6.1.4.B.)	Single family detached dwelling units
Single Family, County			Detached Single Family Unit (6.1.4.B.)	Detached Single Family Unit (6.1.4.B.)	Single family detached dwelling units
Multifamily			Attached Single Family Unit (6.1.4.C.) Apartment (6.1.4.D.) Mobile Home (6.1.4.E) Dormitory (6.1.4.F) Group Home (6.1.4.G) Accessory Residential Unit (6.1.11.B.)	Attached Single Family Unit (6.1.4.C.) Apartment (6.1.4.D.) Mobile Home (6.1.4.E) Dormitory (6.1.4.F) Group Home (6.1.4.G) Accessory Residential Unit (6.1.11.B.)	Attached dwelling units, including apartments, condominiums, and townhomes. Also includes single family manufactured homes, mobile homes, and accessory residential units (ARUs).
Nonresidential					
Retail/Service/Restaurant	44-45 Retail trade 722 Food services and drinking places		Retail (6.1.6.C.) Service (6.1.6.D.) Restaurant/Bar (6.1.6.E.)	Retail (6.1.6.C.) Service (6.1.6.D.) Restaurant/Bar (6.1.6.E.)	Uses include regional-, community-, and neighborhood-serving retail, restaurant, and service commercial establishments, including such uses that are part of mixed-use developments. Specific uses include big-box warehouse stores, department stores, grocery stores, other establishments whose primary purpose is the sale of retail goods or services, and casual and fine dining restaurants and bars. Restaurant/bar uses may also include micro-brewery, micro-distillery or micro-winery uses that serve food or drink for onsite consumption. Businesses that provide services, as opposed to primarily selling retail goods, may include beauty/barber shops, salons, banks, pet grooming, and the storefronts for outdoor recreation guides and tour outfitters.
Office	51 Information 52 Finance & insurance 53 Real estate & rental 54 Professional- scientific & tech svcs 55 Management of companies 561 Administrative & support services 621 Ambulatory health care services 624 Social assistance 813 Membership associations and organizations 91-99 Government & non NAICs		Office (6.1.6.B.)	Office (6.1.6.B.)	Uses include general office as well as medical or dental office. Specific uses include professional services, finance/insurance/real estate uses (not including customer-serving banks), legal, accounting, engineering, architectural, and other design services, administration-type uses, and offices and clinics of counseling and social services.
Lodging	721 Accommodation		Conventional Lodging (6.1.6.D) Short-term Rental Residential Unit (6.1.5.C)	Conventional Lodging (6.1.5.B) Short-term Rental Residential Unit (6.1.5.C) Campground (6.1.5.D) Dude/Guest Ranch (6.1.3.E)	Uses include resorts, hotels, motels, bed and breakfast inns, and residential development in the short-term rental overlay zone.
Industrial	11 Ag, Forestry, Fish & Hunting 23 Construction 31-33 Manufacturing 48-49 Transportation & Warehousing 562 Waste management and remediation services 811 Repair and maintenance		Industrial Uses (Sec. 6.1.9.) Transportation/Infrastructure Uses (Sec. 6.1.10.) Mini-Storage Warehouse (6.1.6.G.) Heavy Retail/Service (6.1.6.F.) Nursery (6.1.6.H.)	Industrial Uses (Sec. 6.1.9.) Transportation/Infrastructure Uses (Sec. 6.1.10.) Mini-Storage Warehouse (6.1.6.G.) Heavy Retail/Service (6.1.6.F.) Nursery (6.1.6.H.)	Uses include construction, manufacturing, processing, transportation/ infrastructure uses, gas stations, general repair shops (including auto repair), warehousing, distribution, and storage uses, as well as food/beverage processing facilities and nurseries. Ancillary office space included as part of industrial development is included.
Amusement/Recreation/ Institutional	61 Educational Services 622 Hospitals 623 Nursing and residential care facilities 71 Arts, entertainment, and recreation		Amusement (6.1.7.B.) Developed Recreation (6.1.7.D.) Outfitter/Tour Operator (6.1.7.E.) Adult Entertainment Business (6.1.7.F) Outdoor Recreation (6.1.3.C) Assembly (6.1.8.B.) Daycare/Education (6.1.8.C.)	Amusement (6.1.7.B.) Developed Recreation (6.1.7.D.) Outfitter/Tour Operator (6.1.7.E.) Outdoor Recreation (6.1.3.C) Assembly (6.1.8.B.) Daycare/Education (6.1.8.C.)	Amusement uses include movie theaters, bowling alleys, music venues, video arcades. Developed recreation may include fitness/sports facilities, gymnasiums, rock climbing facilities, skating rinks, etc. An assembly use is a civic, cultural, or institutional use typically characterized by a public or semi-public gathering area. Daycare/education includes schools and adult/child daycare centers.

Note #1: This table aligns the land use categories used in the affordable housing mitigation program with the Town's and County's LDRs. Specific questions may be addressed to the Town or County Planning Departments, which are responsible for making the final determination of land use category applicability.
Note #2: In all cases, fees are applied based on land use as opposed to business type and the mitigation requirement is tied to the physical development.

Sources: Town of Jackson; Teton County, WY; Economic & Planning Systems, Inc.

Appendix B:

Occupation Distribution by Employment Category

Appendix B Tables are pending

TETON COUNTY WYOMING

BOARD OF COUNTY COMMISSIONERS

TOWN OF JACKSON WYOMING

TOWN COUNCIL

JOINT INFORMATION MEETING
AGENDA DOCUMENTATION

SUBMITTING DEPARTMENT: Parks and Recreation **PRESENTER**: Steve Ashworth

MEETING DATE: April 11, 2022

SUBJECT: **Award scope of Work for the Recreation Center Renovation/Expansion Project**

STATEMENT/PURPOSE
Award of scope of work for Guaranteed Maximum Price Contract for the Recreation Center Renovation/Expansion Project.

BACKGROUND/ALTERNATIVES
In 2019 the voters of Teton County and Town of Jackson approved a SPET measure to renovate and expand the Recreation Center. The ballot language is as follows:
$22,000,000 for designing, planning, engineering, construction and equipping the renovation and expansion of the Teton County/Jackson Recreation Center. The renovation and expansion include an additional gymnasium, indoor walking/jogging track, indoor climbing gym, wellness and fitness opportunities, outdoor aquatics splash pad, general youth-to-senior recreation amenities, associated building infrastructure, King Street extension, storm water management systems, and associated site parking, multimodal circulation, and landscaping. Any unexpended funds, including any unused contingency funds, shall be placed into a designated account, the principal and interest of which shall be used for operations and maintenance of the Teton County/Jackson Recreation Center. This project is sponsored by Teton County.

The Board of County Commissioners approved the award of proposal to GE Johnson Construction on May 4, 2021. Wyoming statutes allow for the use of alternative design and construction delivery methods, which includes the use of construction manager at risk (CMAR). The Wyoming Statutes define a construction manager at risk as a type of construction management delivery in which the construction manager at risk is an advocate for the public entity as determined by the contracts through the preconstruction phase of the project. In the construction phase of a public work, the construction manager at risk is responsible for all project subcontracts and purchase orders and may conduct all or a portion of the public work. Under this delivery method, the construction manager at risk is responsible for providing a Guaranteed Maximum Price (GMP) for the public work to the public entity prior to commencing the public work. In November of 2021 staff received direction and unanimous schematic design approval by the Jackson Town Council and Board of County Commissioners. The direction authorized staff and the design team to proceed with the project to 100% construction documents and solicitation of formal bidding. In the development of the formal bid documents, staff and the design team explored many cost saving and value engineering alternatives. This process has been captured in the cost study log included as an attachment in the staff report. Staff has also completed all entitlement requirements by the Town of Jackson and has received formal planning approval of the project.

The bid documents for the project were formally advertised and solicited in order for the Construction Manager at Risk (CMAR) to present a Guaranteed Maximum Price (GMP) to the public entity contracting for the public work. Bids were publicly opened on Tuesday April 5th at 1:00 PM MST. Representatives of Teton County, GE Johnson Construction, and Wember Owners Representatives were present, and the bid openings were streamed live for contractors.

GE Johnson Construction has assembled the bid results and has provided a Guaranteed Maximum Price (GMP) proposal for consideration. The CMAR contract with GE Johnson approved in September 2021 provided $35,000 to GE Johnson for preconstruction phase services. The CMAR contract also agreed to a construction manager's fee of $699,554.00 plus 2.25% of the total cost of the work, which is included within the GMP. The Owner (Teton County is the designated Owner within the CMAR contract) must accept the GMP presented by the CMAR (GE Johnson) before any construction may commence. Because both the Town of Jackson and Teton County are contributing to the costs of the project above the amount allocated from the SPET ballot, the GMP is being brought today to both the Town of Jackson and Teton County to review. This is with the understanding that the official acceptance of the GMP is done by Teton County, as the owner. The GMP proposal is valid for 30 days from date of issuance. If the Owner and the CMAR do not reach an agreement on the GMP, the Owner may terminate the CMAR contract upon not less than seven days' written notice to the CMAR. The CMAR does retain any funds provided during the preconstruction phase, in this case $35,000.

COMPREHENSIVE PLAN ALIGNMENT

The project as presented aligns with the following values of the Teton County/Jackson Comprehensive Plan:
Value 1- Climate Sustainability: The project has been designed to meet and exceed energy building standards. The project has incorporated electric appliances and systems within the both the new and exiting facility to reduce overall carbon footprint and accommodate photovoltaic panel systems that would supply onsite the energy use for most of the expanded facility. In addition, the project includes the ongoing effort to improve water quality in the Town through the enhancement to the Cache Creek Tube and storm water treatment facilities. Lastly, the project formalizes the communities' commitment to recycling by incorporating a permanent recycling facility for Integrated Solid Waste and Recycling.
Value 3- Quality of Life: The project, as does all the services within the department serves as a crucial component to the quality of life of the community through providing recreational, social service and health enhancement facilities and programs to the community. The project supports and expands collaborative initiatives with community partners promoting healthy activities and lifestyles, mental health through social engagement, and a facility resource for food insecurity. The project site has incorporated the extension of King Street providing redundancy to the transportation systems, the inclusion of multi modal pathway systems linking the town bike system to the north pathway system, and the inclusion of bike parking public transit access.

STAKEHOLDER ANALYSIS

Utilizing the cost study log staff and the design team have identified several add alternate and deduct alternate items to better understand the project cost and provide value options for award consideration. There are six (6) alternate items in the Base Bid:

- McQuay HVAC Replacement
- Splash Pad and associated plaza/landscape
- Extension of the elevator to the roof for maintenance access
- Synthetic sports court between addition and Davey Jackson Elementary School
- Asphalt paved multi-modal separated pathway along King Street Extension
- Second floor mezzanine boulder walls

In addition to the base bid alternates, the project team is currently pricing through competitive bidding seven (7) additional enhancement items. Most of these items have outside funding associated with them or Energy Mitigation Fund consideration. The projects will be brought back to the elected officials for consideration at a future date. The enhancement items currently being bid are:

- Rotunda building envelope renovation (EMP Revenue Consideration)
- Aquatic area lighting renovation (EMP Revenue Consideration)
- Community Shower Building (State of Wyoming Grant Funding Consideration)
- Existing Gym HVAC Renovation and enhancements
- Facility monument sign
- Recycling pad and covered shelter (ISWR Enterprise Fund and 2019 SPET Consideration)
- PV Solar Panel System (EMP Revenue Consideration)

FISCAL IMPACT

The Guaranteed Maximum Price for the project with GE Johnson Construction for the base bid is $32,253,969. The current approved and allocated funds for the project is $22,547,290. Additional funds within the base bid are being requested from the Teton County Energy Mitigation Fund (Current Balance available of $3,406,115.68) in the amount of $1,080,810. To complete base bid items for the project an additional allocation of funds split between FY23 and FY24 would be required in the amount of $5,773,829.40 (45%) for the Town of Jackson, and $7,056,902.60 (55%) for Teton County.

STAFF IMPACT

The project is scheduled to begin June 1, 2022. Existing staff offices are scheduled to be modified, and plans are in place to relocate staff within the current multi-purpose room at the existing recreation center. Front desk operations will be set up in a temporary fashion within the current aquatic lobby area. Apart from short or intermittent closures, the recreation center aquatic facility and gymnasium will remain open and accessible to the public throughout the construction period. The proposed construction timeline will extend to December of 2024.

RECOMMENDATION

Staff recommends award of Guaranteed Maximum Price to GE Johnson Construction for the base bid project in the amount of $32,403,969. Staff also recommends the utilization of Teton County Energy Mitigation Funds for the replacement of the McQuay HVAC system to increase energy efficiency, the upgrade of electrical services and heat recovery HVAC systems and electric hot water cross connection on the addition to reduce energy consumption requirements and accommodate photovoltaic energy systems to significantly reduce offsite energy requirements. Staff also seeks direction from the Boards on consideration of additional alternate items to be included in the Guaranteed Maximum Price.

Working with the Contractor, we feel there remains opportunities to continue value engineering in the following areas:

- Utilization of a hydraulic elevator
- Alternate moisture mitigation application
- Solicit additional and new bids for structural steel
- Explore alternate material and installation application for metal panel siding
- Re-bid polished concrete
- Provide allowance with earthwork sub for keeping re-used materials on site
- Reduce scope of AV/LV/Security scope

The recommended Guaranteed Maximum Price does not reflect any reductions for the above efforts or others. Staff will continue to work with the team to explore options and opportunities to lower the project cost. Any cost savings after the GMP will be returned to the Town and County.

Staff plans to bring back to the Boards a series of enhancement items as listed in the staff report for future consideration along with internal and external funding strategies and sources. Each of the enhancement items are stand alone projects and are not required for the execution of the base project and the commitment made to the community through the 2019 SPET.

ATTACHMENTS

- GE Johnson Construction Cost Study Log
- GE Johnson Construction Bidding Analysis Report
- GE Johnson Construction Cash Flow Projection
- 2019 SPET-Recreation Center Renovation/Expansion Project Funding Summary

SUGGESTED MOTION

1. Move to direct staff to finalize Guaranteed Maximum Price Contract with GE Johnson Construction In the amount not to exceed $32,403,969 for Base Bid Construction as presented in the staff report and present for execution with the Teton County Board of County Commissioners on April 19, 2022, with the understanding that the Town of Jackson will be contributing 45% at $5,773,829.40 and Teton County will be contributing $1,080,810 from Energy Mitigation Funds and 55% at $7,056,902.60.

Other additional motions for consideration that will add to the base Guaranteed Maximum Price:

2. Move to add to the base Guaranteed Maximum Price Contract with GE Johnson Construction the Splash Pad and associated sitework not to exceed $1,029,649 and authorize the utilization of $425,000 towards the project from the Teton County Parks Exaction Fund, with the understanding that the Town of Jackson will contribute 45% and Teton County will contribute 55%.

3. Move to add to the base Guaranteed Maximum Price Contract with GE Johnson Construction the extension of the elevator to the roof for maintenance access not to exceed $105,369, with the understanding that the Town of Jackson will contribute 45% and Teton County will contribute 55%.

4. Move to add to the base Guaranteed Maximum Price Contract with GE Johnson Construction the synthetic Turf play court no to exceed $59,780, with the understanding that the Town of Jackson will contribute 45% and Teton County will contribute 55%.

5. Move to add to the base Guaranteed Maximum Price Contract with GE Johnson Construction the asphalt paved multi-modal pathway along King Street not to exceed $29,235, with the understanding that the Town of Jackson will contribute 45% and Teton County will contribute 55%.

6. Move to include the mezzanine bouldering walls within Entre prises Contract consideration in an amount not to exceed $153,000, with the understanding that the Town of Jackson will contribute 45% and Teton County will contribute 55%.

2019 SPET- Recreation Center Renovation/Expansion Project Funding Summary

{Approved Revenues}		
2019 SPET		22,000,000
2010 SPET [King Street]		325,000
DEQ Stormwater Grant		150,000
EMP Fund [Commissioning Agent]		72,290
{Owners Expenses}		
Misc. Fees/Utilities		-30,000
Climbing Rental Equipment		-25,000
Ftiness Equipment		-325,000
FFE		-100,000
Materials, Testing & Inspections Services		-90,000
Public Art		-125,000
AV Equipment		-75,000
Climbing Vendor, Entre prises		-850,000
Owners Contingency (3%)		-900,000
{Soft Cost}		
Perkins & Will- Arch. And Engineering Services		-1,358,726
Entre Prises- Pre Construction Services		-11,810
Cator Ruma- Commissioning Agent		-78,570
GE Johnson, CMAR Pre-Construction Services		-35,000
Wember- Owners Representative Services		-383,000
Perkins & Will CO1 Request		
	Jorgensen- Cache Tube Design Services	-66,400
	Jorgensen	-7,700
	Perkins & Will	-37,200
Wember Add Services CO1 Request		-20,000
[CONSTRUCTION]		
Base Bid Construction		
	w/GE Johnson Fees and overhead	-30,709,616
	GE Johnson Submittal Development Early Release	-150,000
Upgrade Electric Service & Heat Recovery HVAC Units		-800,000
*McQuay HVAC Replacement**		-228,010
Hot Water Cross Connect		-52,800
	EMP Funds Revenue Request	1,080,810
Town of Jackson Utilities (Water, Sewer, Stormwater)		
	w/GE Johnson Fees and overhead	-463,543
	TOJ Utility Revenue	463,543
Town of Jackson Cache Tube Construction Services- Jorgensen Engineering		-51,000
	TOJ Revenue	51,000
	FY23 to FY24 Project Shortfall	**-$12,830,732**
Alternates w/GE Johnson Fees & Overhead:		
Splash Pad and Associated Site		-1,029,649
	TC Park Exaction Funds Revenue Request	425,000
		-604,649
Elevator to the Roof		-105,369
Synthetic Turf Play Court		-59,780
Asphalt Multi-modal Pathway		-29,235
Mezzanine Boulder Walls [Owner Cost]		-153,000
Future Enhancements w/GE Johnsons Fees & Overhead (Independent Projects):		
Rotunda Repair*		Currently Being Bid
	EMP Fund Revenue Request	
Aquatic Lighting Replacement*		Currently Being Bid
	EMP Fund Revenue Request	
Community Shower Building		Currently Being Bid
	State of Wyoming Grant (50%) Revenue Request	
Existing Gym HVAC Upgrade		Currently Being Bid
Monument Sign		Currently Being Bid
Recycling Pad and Covered Shelter		Currently Being Bid
	ISWR Revenue	
PV Solar Panels* [1,061 panel or 256,104 kWh]		-725,000
	Climbing Gym - 67,000kWh	
	Wellness/Fitness Studios-54,000kWh	
	New Gym- 117,303 kWh	
	Multi-purpose Room- 11,430kWh	
	Drop-in Daycare- 13,554kWh	
	EMP Fund Revenue Request	725,000
		0

** Represents projects identified in 2021 Energy Audit*

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Over the past 14 months, several factors have affected the overall cost for the Teton Rec Center Project. The construction market in Teton County is busier than we have seen in our 21-year history in the valley. The thriving regional market and global conditions have compounded to increase costs across the board. Material escalation, labor availability, qualified subcontractors, and overall housing costs are the key elements driving costs.

The current market conditions and supply chain issues are forcing high demand for construction materials and an increase in diesel costs. Factory shutdowns and border closures through the start of the pandemic have created competition for key materials that are in short supply. These items along with the current war in Ukraine have resulted in broad pricing hikes across the construction industry. Here are a few specific examples of commodity increases over the past year for reference (January 21 – January 22):

*Asphalt	15%
*CMU	29%
*Wide Flange Beams	33%

In addition to the material and supply chain costs, we have seen a significant cost increase for qualified labor and staff housing in Teton County. We have increased our per diem and cost of living adjustments to offset the housing market increases.

Over the past year, we have worked diligently with the Rec Center staff, trade partners, and design team to mitigate market conditions. As a team, we developed a considerable number of cost-reduction ideas while always preserving the mindset that this building will need to serve the community for the next 100 years.

We are continuing to work with the team to review adjustments to the Recreation Center Improvements project that will lower the cost while providing value to the community. We will continue to evaluate the options below while moving the project forward.

- Alternate flooring moisture mitigation applications
- Exterior metal panel product changes
- Exterior cement panel product changes
- Simplifying lighting controls, security, and audio and visual system

Construction materials are going through unprecedented shortages and cost increases that have been challenging to predict. The need to lock in not only a price but also guarantee of material availability is more important than ever. We will continue to implement mitigation strategies to minimize any future impacts and keep the project moving forward.

*Market Conditions Report Q1 2022 – DPR Construction

Teton County Rec Center Cash Flow Projection

GE JOHNSON CONSTRUCTION WYOMING

Precon Start	5/1/2021
Const Start	5/15/2022
Const Finish	2/1/2024
Duration	20
Total Cost:	$31,825,000

	Percent Complete				
	Phase 1	*Phase 2*	*Phase 3*	*Phase 4*	*Phase 5*
Value	$31,825,000				
Month	20				
Start	May 22				
	Jan 24				
	0				
	20				

Mo.		Date	Mo. Billing	% Complete	Billing Amount	Phase 1	Phase 2	Phase 3	Phase 4	Phase 5
1	5	May 22		1.18%	$375,421	1.18%	0.00%	0.00%	0.00%	0.00%
2	6	Jun 22		1.83%	$582,904	1.83%	0.00%	0.00%	0.00%	0.00%
3	7	Jul 22		2.97%	$946,033	2.97%	0.00%	0.00%	0.00%	0.00%
4	8	Aug 22		4.10%	$1,304,658	4.10%	0.00%	0.00%	0.00%	0.00%
5	9	Sep 22		5.10%	$1,621,646	5.10%	0.00%	0.00%	0.00%	0.00%
6	10	Oct 22		5.97%	$1,898,704	5.97%	0.00%	0.00%	0.00%	0.00%
7	11	Nov 22		6.61%	$2,104,009	6.61%	0.00%	0.00%	0.00%	0.00%
8	12	Dec 22		7.25%	$2,306,891	7.25%	0.00%	0.00%	0.00%	0.00%
9	13	Jan 23		7.55%	$2,402,969	7.55%	0.00%	0.00%	0.00%	0.00%
10	14	Feb 23		7.82%	$2,489,263	7.82%	0.00%	0.00%	0.00%	0.00%
11	15	Mar 23		7.82%	$2,489,263	7.82%	0.00%	0.00%	0.00%	0.00%
12	16	Apr 23		7.53%	$2,397,969	7.53%	0.00%	0.00%	0.00%	0.00%
13	17	May 23		7.25%	$2,306,891	7.25%	0.00%	0.00%	0.00%	0.00%
14	18	Jun 23		6.69%	$2,129,009	6.69%	0.00%	0.00%	0.00%	0.00%
15	19	Jul 23		5.97%	$1,898,704	5.97%	0.00%	0.00%	0.00%	0.00%
16	20	Aug 23		4.95%	$1,576,646	4.95%	0.00%	0.00%	0.00%	0.00%
17	21	Sep 23		3.96%	$1,259,658	3.96%	0.00%	0.00%	0.00%	0.00%
18	22	Oct 23		3.00%	$955,545	3.00%	0.00%	0.00%	0.00%	0.00%
19	23	Nov 23		1.83%	$582,904	1.83%	0.00%	0.00%	0.00%	0.00%
20	24	Dec 23		0.62%	$195,909	0.62%	0.00%	0.00%	0.00%	0.00%
21	25	Jan 24		0.00%		0.00%	0.00%	0.00%	0.00%	0.00%
22	26	Feb 24		0.00%		0.00%	0.00%	0.00%	0.00%	0.00%
23	27	Mar 24		0.00%		0.00%	0.00%	0.00%	0.00%	0.00%
				Total	$31,825,000					
				Check Total	($0)					

Teton County, Jackson Recreation Center Addition & Remodel

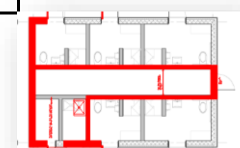
Design Development Phase

February 2, 2022

GEJOHNSON CONSTRUCTION WYOMING

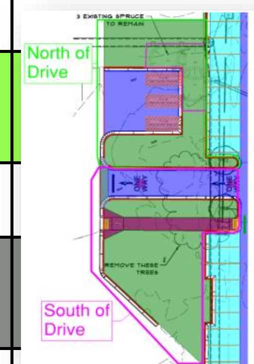
COST STUDY LOG

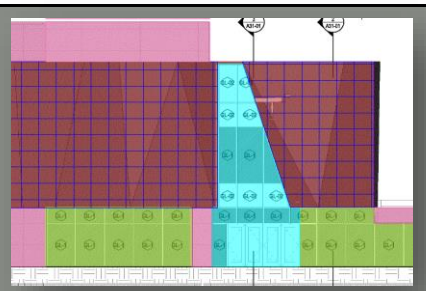
Design Development Estimate dated 01/12/22	$	31,482,825		
Owner Budget	$	27,830,159		
Variance	$	3,652,667	13%	
Accepted	$	(1,666,152)		Potential for additional funding source.
Rejected	$	(1,796,454)		
Pending Add	$	2,371,063		
Pending Deduct	$	(105,874)		
Incorporated into Drawings	$	-		
Total Variance w/ Accepted Items	$	29,816,673		
Total Estimate w/ Accepted Items	**$**	**29,816,673**	7%	
Amount Over Budget w/ Accepted Items	$	1,986,514		

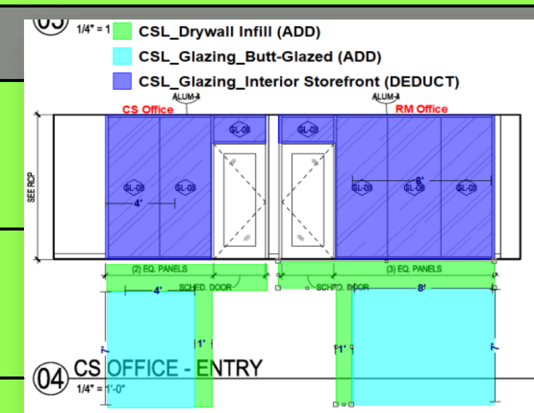
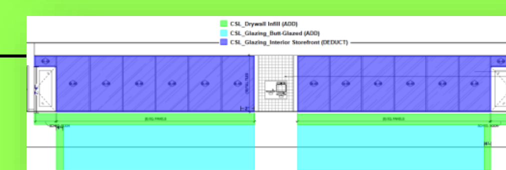
Uniformat Level 2	Description	Direct Cost of Work (DCOW)	DCOW w/Markups	Item Status	Date of Decision	Notes
0	**General / Alternates**					
0.02.01	**ELEVATOR ROOF ACCESS**: Eliminate the Elevator Access to the Roof.	$ (94,300)	$ (108,461)	Accepted	1/21/2022	**01/21/22: To be a DEDUCTIVE Alternate in the CD Set.**
0.03.01	**ROTUNDA IMPROVEMENTS**: Add Scope to Upgrade the Exterior Envelope at the Rotunda. EIFS, Storefront, Kalwall replacements & Roof Extension) & Kalwall Replacement at Gym	$ 325,708	$ 374,619	Pending Add		Priced previously during SD's. Refer to SD CSL #B.11.00. **01/21/22: To be an ADDITIVE Alternate in the CD Set.**
0.04.01	**NATATORIUM LIGHTS**: Replace the Lights in the Natatorium.	TBD	TBD	Pending Add		1/13/22: Need more information
0.05.01	**SHOWER BUILDING ANNEX**: Add Shower Building Located in the Parking Lot. See Drawing for Information. Exterior Wall to Match EXT-1A (SIM), Assume 8" CMU.	$ 630,785	$ 725,508	Pending Add		 **pe an ADDITIVE e CD Set.**
0.06.01	**ENERGY RECOVERY**: Retain all electric building heating system; eliminate energy recovery wheels on the rooftop units. Group 14 confirmed this is not needed to meet code.	$ (269,082)	**$ (309,489)**	Rejected	2/8/2022	

Uniformat Level 2	Description	Direct Cost of Work (DCOW)	DCOW w/Markups	Item Status	Date of Decision	Notes
0.06.02	**HYBRID MECH SYSTEM:** Revise all electric heating system to a hybrid gas/electric system. Revise currently specified electric heat pump / electric resistance heat, rooftop units with energy recovery to gas heating DX cooling rooftop units, Daikin Rebel type (no energy recovery, no heat pump). Electric heating terminal units, cabinet unit heaters and unit heaters to remain as specified on the DD documents.	$ (314,883)	**$ (362,168)**	**Rejected**	2/8/2022	Standard SC (RTU 1-6). Units are gas fired w/Stainless Steel heat exchangers and air cooled condenser with 6-row evap coil.
0.07.01	**REPLACE MECH UNITS:** Demo the (2) Existing Heating & Ventilating Units Currently Serving (2) New AAON H3-D Air Handling Units (6k CFM) w/Split DX Condensing Units & Hot Water Coil in Place of the Demo'd Equip. Extend & Connect Existing HWS/R Piping to New Units w/New Control Valves, etc. Provide Refrigerant Piping from Roof Mounted Condensing Units to DX Cooling Coil. Provide New Wall Mounted Temp Sensors in Place of Demo'd Thermostats.	$ 371,438	$ 427,215	Pending Add		**01/21/22: To be an ADDITIVE Alternate in the CD Set.** (Cooling in the gym)
0.08.01	**ELIM REPLACING McQUAY UNIT:** Leave the existing McQuay (Constant Volume reheat system) ilo replacing unit with a more Efficient System (RTU-6), Including Associated Architectural Demo Scope. This services Child Care. Retain the existing constant volume reheat system including the McQuay grade mounted RTU and (3) hydronic zone re-heating coils. Ductwork modifications as indicated on the DD drawings is still required for the Lobby E102 re-heat zone. Include addition of (1) hydronic zone (VAV-6.1) (or reheat coil) for service to Child Care. Connect additional hydronic zone to the existing heating water piping in this area. No line volt power needed.	$ (92,051)	**$ (105,874)**	**Pending Deduct**		**02/04/22: To be an DEDUCTIVE Alternate in the CD Set.**
0.08.02	**ELIM REPLACING McQUAY UNIT IF 0.06.02 is ACCEPTED**: Remove AAON-013 (RTU-6) w/42" tall horizontal discharge plenum roof curb.	$ (69,694)	$ (80,160)	Rejected	2/8/2022	**Depending on if 0.06.02 is Accepted.**
0.08.03	**ELIM REPLACING McQUAY UNIT IF 0.06.01 is ACCEPTED**: Remove AAON-013 (RTU-6) w/42" tall horizontal discharge plenum roof curb.	$ (69,987)	$ (80,497)	Rejected	2/8/2022	**Depending on if 0.06.01 is Accepted.**

Uniformat Level 2	Description	Direct Cost of Work (DCOW)	DCOW w/Markups	Item Status	Date of Decision	Notes
0.10.01	**SPLASH PAD:** Install Splash Pad ($500,000 Allowance) and Adjacent Landscaping, Hardscape and Perimeter Fence. Area of Work determined by Fence Line around Splash Pad.	$ 624,800	$ 718,625	Accepted	1/14/2022	See also Trend Log, Section 5. **01/21/22: To be a DEDUCTIVE Alternate in the CD Set.**
0.10.02	**SPLASH PAD/ICE ARENA:** Install Splash Pad / Ice Arena and Adjacent Landscaping, Hardscape and Perimeter Fence. Area of Work determined by Fence Line around Splash Pad.	TBD	TBD	Overlaps Other CSL Items		
0.11.01	**TURF**: Install Turf at East Play Area (in lieu of Native Seed).	$ 47,266	$ 54,364	Pending Add		**01/21/22: To be a ADDITIVE Alternate in the CD Set.**
0.12.01	**SITE WEST OF WEST LOT:** Delete recycling area scope West of the West Lot. North of Drive.	$ (45,214)	$ (52,004)	Accepted	[illegible]	1/28/22: Accepted. **To be an ADDITIVE ALTERNATE**
0.12.02	**Shelter:** Add Recycling Shelter (West of West lot, North of Drive)	$ 148,996	$ 171,371	Pending Add		**1/26/22: Needs Shelter Design. To be an ADDITIVE Alternate**
0.12.03	**SITE WEST OF WEST LOT:** Delete sitework scope West of the West Lot. Drive and South of Drive.	$ (42,460)	$ (48,836)	Rejected	[illegible]	
0.12.04	**Shelter:** Add Recycling Shelter **without Fiber Cement Panel** (West of West lot, North of Drive)	$ 125,203	$ 144,005	Overlaps Other CSL Items	1/28/2022	
0.13.01	**MONUMENT SIGN**: Replace the Monument Sign, based on new design which Must be Demo'd for King Street Realignment, ilo only $25k Allowance.	$ 44,801	$ 51,529	Pending Add		**01/21/22: To be a ADDITIVE Alternate in the CD Set.**
0.14.01	**PARTY ROOM**: Existing Floor and Millwork to Remain in the Party Room in lieu of Demo and Replace Flooring and Millwork. Ceiling will still need to be replaced to accommodate new mechanical scope.	$ (28,591)	$ (32,884)	Accepted	1/21/2022	NOTE: Ceiling replacement is associated with **CSL 0.08.01**.
0.15.01	**OPERABLE PARTITION**: Standard Gypsum System Wall in lieu of Operable Partition.	$ (40,660)	$ (46,765)	Accepted	1/21/2022	
B	**Shell**					
B.02.02	**FIBER CEMENT PANEL:** Utilize a new lower subcontractor for the specified Fiber Cement Paneling (American Fiber Cement).	$ (102,185)	$ (117,530)	Accepted	1/21/2022	This can be priced as exposed fasteners.
B.02.05	**FIBER CEMENT PANEL**: Utilize Patina product ilo Inline Patina (all from American Fiber Cement).	$ (182,501)	$ (209,906)	Accepted	2/14/2022	**ALT to go to Inline Patina**
B.03.01	**Overhead Door**: Remove overhead door out of gymnasium.	$ (15,874)	$ (18,258)	Accepted	1/21/2022	
B.05.01	**1/26/22 Revised Elevations**: Based on new design (~~Reduced metal panel~~, Reduced glazing, changes some curtainwall to storefront, increased amount of angled metal panel, increases qty of fiber cement)	$ (12,310)	$ (14,159)	Accepted	1/28/2022	



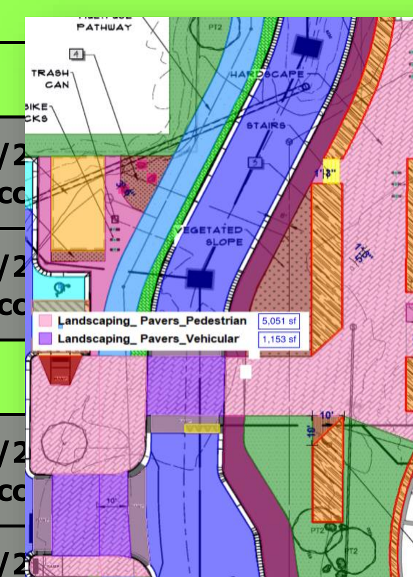
Uniformat Level 2	Description	Direct Cost of Work (DCOW)	DCOW w/Markups	Item Status	Date of Decision	Notes
B.05.02	**Metal Panel Folds**: Remove all folds/3D shaping and make flat faced metal panel. Based on 1/26/22 Revised Elevations.	$ (157,994)	$ (181,720)	Rejected	2/4/2022	Based on Acceptance of B.05.01
B.05.05	**Metal Panel:** Utilize Standing Seam Pre-Painted Rust Look metal siding product **OR** AEP Span Metal Siding product ILO Spec'd Metal Panel. Based on 1/26/22 Revised Elevations.	$ (261,483)	$ (300,749)	Accepted	2/2/2022	Based on Acceptance of B.05.01. Rebecca approved via phone conversation
B.05.08	**Insulation:** Utilize Poly-Iso Insulation at both Metal Panel and Fiber Cement Panels ILO Rockwool Insulation as Spec'd (**ROM COST ALLOWANCE**)	$ (140,069)	$ (161,102)	Rejected	1/28/2022	**1/28/22: Fire rating issue, cannot accept. Needs to be a non-combustible product.**
B.05.09	**Fiber Cement Panel:** Eliminate Rainscreen application. Based on 1/26/22 Elevations.	N/A	N/A	Rejected	2/8/2022	**Per sub input: can't get rid of rainscreen application because we will run into moisture problems down the road. Need drainage gap. Rebecca confirmed w/manuf.**
B.05.10	**Insulation:** Utilize Dow Defendaire and Carlisle R2+ insulation at both Metal Panel and Fiber Cement Panels ILO Rockwool Insulation as Spec'd (this achieves NFPA 285).	TBD	TBD	Rejected		
B.06.01	**Climbing Gym Column**: Remove column behind climbing gym.	TBD	TBD	Pending Deduct		**1/24/22: Waiting on further information from P+W**
B.08.01	**Glazing**: Remove curtainwall above lobby 101 and replace with Fiber Cement Paneling.	$ (11,656)	$ (13,407)	Rejected		
C	**Interiors**					
C.02.02	Acoustical Metal Ceilings: Provide **acoustic metal decking** ilo of the specified standard metal decking, eliminating the Armstrong Ultima (ACT-01) ceilings shown on 2nd level. (Armstrong Ultima ACT-01 still to be included on Level 1 where DD set shows ACT-02 & ACT-03). **Lights aren't affected. Linear diffusers and duct system would be modified accordingly.**	$ (58,383)	$ (67,150)	Accepted	1/21/2022	
C.02.05	Dune **ACT** ceiling ilo Armstrong Ultima (ACT-01) - 1st Floor ACT-02 & 03 locations only.	$ (1,444)	$ (1,661)	Rejected	2/8/2022	
C.02.06	Fine Fissured **ACT** ceiling ilo Armstrong Ultima (ACT-01) - 1st Floor ACT-02 & 03 locations only.	$ (10,042)	$ (11,550)	Rejected	2/8/2022	

Uniformat Level 2	Description	Direct Cost of Work (DCOW)	DCOW w/Markups	Item Status	Date of Decision	Notes
C.04.01	Utilize Equivalent Non-Spec'd Product (Icon 9mm MultiSport or 8mm Encore Bounce) for **Athletic Flooring** ILO Spec'd Product	$ (17,500)	$ (20,128)	Rejected	2/8/2022	**1/28/22: Sent product data to Rebecca.**
C.05.01	Replace **3Form** Railing with metal railing.	$ (44,916)	$ (51,661)	Accepted	2/4/2022	
C.06.01	Target $75,000 **millwork** scope reduction.	$ (75,000)	$ (86,263)	Rejected		
C.06.02	Remove **counter** at new gymnasium.	$ (30,277)	$ (34,824)	Accepted	1/21/2022	
C.06.03	Remove **fitness counter island with waterfall edges** at Level 2 fitness area.	$ (20,142)	$ (23,167)	Accepted	2/4/2022	1/21/22: Pending - explore less costly options.
C.06.04	Provide Corian Group 3 **countertops** in lieu of Quartz at Two Exam Rooms, Mother's Room, and Break Room.	$ (3,785)	$ (4,353)	Accepted	1/21/2022	
C.06.05	Reduction of **new casework** and instead relocation of existing in several areas. Per Drawing received 1/24/22	$ (21,504)	$ (24,733)	Accepted	2/4/2022	
C.07.01	Replace **polished concrete** with sealed concrete.	$ (9,857)	$ (11,337)	Rejected	2/4/2022	
C.08.01	**Reduce Glazing**: Replace storefront door & frame with **HM frame & Wood Doo**r and replace storefront with butt-glazed glass and drywall above. **(Climbing Office)**	$ (588)	$ (676)	Accepted	2/4/2022	
C.08.02	**Reduce Glazing**: Replace storefront door & frame with **HM frame & Wood Door** and replace storefront with butt-glazed glass and drywall above. **(RM Office)**	$ (3,499)	$ (4,024)	Accepted	2/4/2022	
C.08.03	**Reduce Glazing**: Replace storefront door & frame with **HM frame & Wood Door** and replace storefront with butt-glazed glass and drywall above. **(CS Office)**	$ (3,166)	$ (3,641)	Accepted	2/4/2022	
C.08.04	**Reduce Glazing**: Replace storefront doors with **HM frame & Wood Door** and replace storefront with butt-glazed glass with drywall above. **(Flex Studios)**	$ (10,513)	$ (12,091)	Accepted	2/4/2022	
C.09.01	Target $60,000 reduction in building **signage** allowance. DD Estimate includes $80k. This would only include Code Signage.	$ (60,000)	$ (69,010)	Accepted	1/21/2022	
C.10.01	Provide shower curtains in lieu of **glass shower doors** at locker rooms.	$ (3,069)	$ (3,530)	Accepted	1/21/2022	
C.13.01	Provide Daltile in lieu of specified (multiple brands) **tile** selections. • Replace specified TL-01 with Daltile Multitude • Replace specified TL-02, TL-03, TL-05, TL-06, & TL-10 with Daltile Color Wheel Collection Classic • Replace specified TL-04 & TL-07 with Daltile Fabric Art • Replace specified TL-08 with Daltile Color Wheel Collection Mosaic	$ (51,593)	$ (59,341)	Accepted	2/2/2022	**1/28/22: Sent product data to Rebecca. 2/2: Rebecca approved.**

Uniformat Level 2	Description	Direct Cost of Work (DCOW)	DCOW w/Markups	Item Status	Date of Decision	Notes
D	**Services**					
D.01.01	**ELEC**: Utilize Aluminum Feeders with Copper Grounding Conductors of 100A or Larger for Feeders shown on One-Line (Sheet E32-01) in lieu of Copper Feeders with Copper Grounding Conductors.	$ (110,000)	$ (126,518)	Accepted	1/21/2022	**1/21/22: Accepted by Owner. Design team to verify this is acceptable.**
D.02.01	**LOW VOLT**: Add allowance for AV equipment (including but not limited to TVs, Monitors, Speakers) per AV/Sound Note 7 on E61-61. Conduits, sleeves, backboxes, cabling and speaker enclosures are included in Base Bid.	$ 135,600	$ 155,963	Rejected	2/4/2022	1/21/22: Adjust to have speakers included, but alt add for tv's/monitors. **2/4/22: FF&E Scope, GEJ to help coordinate**
D.03.01	**PLUMBING**: Add hot & cold water taps on roof (Anti-Freeze) for cleaning coils, roof drains, scuppers, etc. (Varies based on location of taps.)	$ 3,750	$ 4,313	Accepted	2/4/2022	2/4/22: Include in base bid ONLY cold water tap.
D.04.01	**ELEC**: More Cost Efficient Light Fixtures: **TARGET**	$ (200,000)	$ (230,033)	Rejected	1/21/2022	**2/1/22: Realized $40k of savings to date - see D.04.02**
D.04.02	**ELEC**: More Cost Efficient Light Fixtures: **TARGET**	$ (40,000)	$ (46,007)	Accepted	2/2/2022	**2/2/22: Revised deduct for more realistic reduction per design team.**
D.06.01	**MECH/ELEC:** Eliminate (2) HVLS fan (CF-1 & 2) in the gym.	$ (25,182)	$ (28,964)	Accepted	2/4/2022	
D.09.01	**PLUMBING**: Change EWH-1, ST-1 back to (1) AO Smith BTH-199 gas fired high efficiency water heater located in the new mechanical room. This water heater will be sized to handle the addition only. Gas meter will be provided at this location by local gas company in lieu of routing to existing gas meter at existing boiler room. 120V Circuit for controls needed only. Remove HW and HWC piping back to the existing boiler room, this will not be needed now since this new water heater will only be serving the addition and not the future building needs. The old heat exchanger will need to be replace at the time of failure by other means.	$ (107,428)	$ (123,560)	Rejected	2/8/2022	

Uniformat Level 2	Description	Direct Cost of Work (DCOW)	DCOW w/Markups	Item Status	Date of Decision	Notes
D.09.02	**PLUMBING**: Change EWH-1, ST-1 back to (1) AO Smith BTH-400 gas fired high efficiency water heater located in the mechanical room. This water heater will be sized slightly larger with space to add another GWH-2 to handle the entire building once the old heat exchanger fails. GWH-2 will be a future heater but water and gas piping will be capped for future connection. Gas meter will be provided at this location by local gas company in lieu of routing to existing gas meter at existing boiler room. Leave the HW and HWC piping back thru the natatorium to reconnect to the existing HW and HWC systems at the old boiler room once the old heat exchanger fails.	$ (37,428)	**$ (43,048)**	Rejected	2/8/2022	
D.09.03	**PLUMBING**: Change from heat pump electric domestic water heater to straight electric. Replace EWH-1 and ST-1 with (3) AO Smith DSE-120-30 KW each.	$ (42,224)	$ (48,565)	Rejected	2/8/2022	
D.12.02	**PLUMBING**: Eliminate cooling from the (3) EWC-1	$ (9,000)	$ (10,352)	Accepted	2/4/2022	
D.13.01	**FIRE PROTECTION:** Change fire sprinkler heads from semi recessed white to concealed white in all finished ceiling areas.	$ 2,552	$ 2,935	Accepted	2/4/2022	
D.14.01	**FIRE PROTECTION:** Eliminate requirement to "Remove and Replace (E) double check backflow preventer w/ approved vertical double check backflow preventor" (See note on FP10-01). Need to verify not required.	$ (4,850)	$ (5,578)	Accepted	2/4/2022	
D.14.02	**FIRE PROTECTION:** Replace (E) check valves in existing backflow preventer ilo replacing entire backflow preventer.	$ (2,350)	$ (2,703)	Rejected	2/4/2022	**Priced as if D.14.01 is accepted.**
D.15.01	**ELEC**: Utilize MC Cabling where not exposed.	$ (3,535)	$ (4,066)	Accepted	1/21/2022	**1/21/22: P+W ok with this. Need to verify this pricing isn't affected by the 2nd floor ceiling which was removed (CSL above)**
D.16.01	**ELEC**: Utilize free air cabling for Fire Alarm where not exposed.	$ (7,848)	$ (9,027)	Accepted	1/21/2022	**1/21/22: P+W ok with this. Need to verify this pricing isn't affected by the 2nd floor ceiling which was removed (CSL above)**
D.17.01	**ELEC**: Reduce the quantity of outlets.	TBD	TBD	Accepted	1/21/2022	**1/21/22: Need more information. But this is acceptable by Owner.**
D.18.01	**Mechanical Controls:** Change controls from Long to open spec	TBD	TBD	Accepted	2/4/2022	
E	**Equipment & Furnishings**					
F	**Special Construction & Demolition**					

Uniformat Level 2	Description	Direct Cost of Work (DCOW)	DCOW w/Markups	Item Status	Date of Decision	Notes
G	Sitework					
G.01.01	Utilize **Avail** Pricing ilo **Westwood Curtis** for the Earthwork/Utilities Scope. NOTE: Westwood Curtis will likely be booked before buyout.	$ 455,403	$ 523,790	Pending Add		
G.02.01	**Site Furnishings**: Transfer Chairs and Tables from GEJW to Owner Provided Scope.	$ (31,000)	$ (35,655)	Accepted	1/21/2022	
G.05.02	**Pavers**: Replace pedestrian area (pink on image) pavers with scored concrete.	$ (56,824)	**$ (65,357)**	**Accepted**	2/4/2022	
G.05.05	**Pavers**: Replace pedestrian area (pink on image) pavers with Belgard Cambridge Cobble or Holland pavers.	$ (29,700)	$ (34,160)	Rejected	2/4/2022	**1/28/2 Rebecc**
G.05.06	**Pavers**: Replace pedestrian area (pink on image) pavers with Belgard Catalina Grana Stone pavers.	$ (21,593)	$ (24,836)	Rejected	2/4/2022	**1/28/2 Rebecc**
G.05.07	**Pavers**: Replace vehicular area (purple on image) pavers with scored concrete.	$ (12,971)	**$ (14,919)**	**Accepted**	2/4/2022	
G.05.08	**Pavers**: Replace vehicular area (purple on image) pavers with Belgard Cambridge Cobble or Holland pavers.	$ (6,780)	$ (7,798)	Rejected	2/4/2022	**1/28/2 Rebecc**
G.05.09	**Pavers**: Replace vehicular area (purple on image) pavers with Belgard Catalina Grana Stone pavers.	$ (4,929)	$ (5,669)	Rejected	2/4/2022	**1/28/2 Rebecca.**
G.06.01	**Boulders**: Remove seven boulders.	$ (3,150)	$ (3,623)	Accepted		**1/21/22: To be an ADD Alternate in the CD set.**
G.07.01	**Asphalt**: Reuse existing asphalt as site fill.	$ (42,000)	$ (48,307)	Accepted		
G.09.01	**Planters**: Provide cast-in-place 30" raised planters. (Footings + 750lf walls)	$ 127,770	$ 146,957	Rejected		1/21/22: Revise pricing with new drawing (to be received by design team), see G.09.03
G.09.02	**Plantings at Planters**: Replace mulch and plantings at planter beds with bluegrass sod.	$ (20,407)	$ (23,471)	Rejected		1/21/22: Revise pricing with new drawing (to be received by design team). Refer to G.10.01
G.09.03	**Planters**: Per revised design, Concrete foundations, Split-Faced CMU Walls.	$ 37,097	$ 42,668	Pending Add		2/2/22: Received revised landscape drawings: concrete foundation doubled in cross-sectional area. **2/4/22: These walls will be reduced in final design.**
G.10.01	**Landscaping**: Revised Landcape scope based on new drawing.	$ 14,327	$ 16,479	Accepted		**2/2/22: Received revised landscape drawings: Turf areas replaced with tree and shrub beds, shrubs added**
G.12.01	**COJ Curb Painting:** Savings if City of Jackson can provide curb painting along King Street / Cache Tube.	$ (15,990)	$ (18,391)	Accepted		



Uniformat Level 2	Description	Direct Cost of Work (DCOW)	DCOW w/Markups	Item Status	Date of Decision	Notes
G.13.01	**King Street Excavation:** Replaced excavation with reused on site and reduced pit run import.	$ (62,513)	**$ (71,900)**		2/4/2022	**2/2/22: Coordination meeting held w/Westwood Curtis and Jorgenson on 1/31. Pricing reflects discussion.**
G.14.01	**Building Sitework Excavation:** Reduced excavation with reused on site and reduced pit run import.	$ (131,563)	**$ (151,319)**		2/4/2022	**2/2/22: Coordination meeting held w/Westwood Curtis and Jorgenson on 1/31. Pricing reflects discussion.**
G.15.01	**IPE Benches:** Remove IPE benches, replace with owner-provided, owner-installed seating.	$ (13,670)	$ (15,723)	Rejected		1/21/22: To be aligned with Alison's drawing. Two built-ins and the rest are by Owner FF&E. Pricing to be updated accordingly.
G.16.01	Replace **Pathway** along King Street (West side) with sod.	TBD	TBD	Pending Deduct		**1/21/22: Make an Alternate DEDUCT**
G.17.01	Eliminate 12 Aspen Trees along King Street.	$ (4,620)	$ (5,314)	Accepted		
Z	**General**					
Z.01.01	Reduce taxes included. Assumed taxes during final GMP to be broken out and Materials Paid Directly by Owner.	$ (438,450)	$ (504,291)	Accepted		
Z.02.01	Further reduce **escalation contingency** by an additional 0.5% (still holding 1%).	$ (140,000)	$ (161,023)	Rejected		
Z.03.01	Reduce Owner Contingency	ALT BUDGET	ALT BUDGET			

Log continues on following sheets

	Totals					

Note: These cost studies suggest possible alternative approaches for consideration by the Owner and the Owner's design professionals and agents. All alternatives suggested by G.E. Johnson Construction must be thoroughly reviewed and evaluated by same. G.E. Johnson Construction does not employ, and is not intended to employ, architects or engineers to evaluate the suitability of any possible suggested cost saving alternatives.