



Town Hall 551 Hot Springs Blvd
Pagosa Springs, CO 81147

AGENDA

Town Council Meeting
Tuesday, September 16, 2025 @ 5:00 PM

1. REMOTE PARTICIPATION

A Zoom link is made available, however, the Town does not and cannot guarantee internet service or online broadcasting. Remote attendance is at the risk of the attendee as the public meeting will continue in person regardless of the Town's broadcast capability.

Join Zoom Meeting By Computer - <https://zoom.us/j/86468419443>

Dial by Phone - 1-669-900-6833 US - Meeting ID: 864 6841 9443

I. CALL MEETING TO ORDER

II. ROLL CALL

III. PLEDGE OF ALLEGIANCE

IV. DISCLOSURES AND/OR CONFLICT OF INTEREST

V. PUBLIC COMMENT

VI. CONSENT AGENDA

1. Approval of the September 2, 2025 Meeting Minutes

[Town Council - 02 Sep 2025 - Minutes - Pdf](#)

2. August Financial Statement and Payments

VII. REPORTS TO COUNCIL

1. Sales Tax Brief

Sales Tax Report - July 2025

[Agenda Brief - Sales Tax Report - July 2025 - Pdf](#)

2. Other Department Reports

Administration Report

[Agenda Brief - Administration - Pdf](#)

Development Department Monthly Report - September 2025

[Agenda Brief - Development Department Monthly Report - September 2025 - Pdf](#)

Lodging Tax Report

[Agenda Brief - Lodging Tax Report - Pdf](#)

Municipal Court Report

[Agenda Brief - Municipal Court Department Report - Pdf](#)

Parks and Recreation Report

[Agenda Brief - Parks and Recreation Department Monthly Report - Pdf](#)

Police Department Report

[Agenda Brief Police Department Head Report - Pdf](#)

Public Works Department Brief

[Agenda Brief - Public Works Department Update - Pdf](#)

*Public comment and agenda comment item sign-up sheets are available at the meeting
Copies of proposed Ordinances and Resolutions are available to the public from the Town Clerk*

VIII. UNFINISHED BUSINESS

1. Ordinance 1018, Second Reading, an Ordinance Annexing Certain Municipal Owned Property known as 1040 East U.S. Highway 160
[Agenda Brief - Ordinance 1018, Second Reading, an Ordinance Annexing Certain Municipal Owned Property known as 1040 East U.S. Highway 160 - Pdf](#)

IX. NEW BUSINESS

1. Geothermal Rate Study performed by Roaring Fork Engineering
[Agenda Brief - Geothermal water rates study for the Town of Pagosa Springs for 2025 - Pdf](#)
2. Resolution 2025-16, Supporting the Submittal of CPW Non-Motorized Trails Grant Application for the Town to Lakes Trail
[Agenda Brief - Resolution 2025-16, Supporting the Submittal of CPW Non-Motorized Trails Grant Application - Pdf](#)
3. Resolution 2025-17, Approving Submission of State Historical Fund General Grant Application for continued restoration efforts of the historic Water Treatment Plant and Rumbaugh Creek Stone Arched Bridge
[Agenda Brief - Resolution 2025-17, Approving Submission of State Historical Fund Grant Application - Pdf](#)
4. Ordinance 1019, First Reading, Amending the Official Zoning Map Regarding Property Known As 1040 East U.S. Highway 160.
[Agenda Brief - Ordinance 1019, First Reading, Amending the Official Zoning Map Regarding Property Known As 1040 East U.S. Highway 160. - Pdf](#)

X. PUBLIC COMMENT

XI. MAYOR, COUNCIL, TOWN MANAGER COMMENTS/UPCOMING AGENDA ITEMS

XII. UPCOMING COUNCIL MEETINGS

- September 22, 2025: Joint Town-County Work Session
- September 22, 2025: Town Council Meeting
- September 30, 2025: Town Council Work Session
- October 7, 2025: Regular Council Meeting
- October 20, 2025: Joint Town-County Work Session
- October 21, 2025: Regular Council Meeting
- November 6, 2025: Special Town Council Meeting

XIII. ADJOURNMENT

Shari Pierce
Mayor



Town Hall 551 Hot Springs Blvd
Pagosa Springs, CO 81147

MINUTES

Town Council Meeting
September 2, 2025 @ 5:00 PM

A regular meeting of the Pagosa Town Council was called to order on September 2, 2025, at 5:00 PM in the Town Hall 551 Hot Springs Blvd.

COUNCIL PRESENT: Mayor Pierce, Council Member Bergon, Council Member DeGuise, Council Member Martinez, and Council Member Williams

COUNCIL ABSENT: Council Member deGraaf and Council Member Lindner

I. CALL MEETING TO ORDER

II. ROLL CALL

III. PLEDGE OF ALLEGIANCE

IV. DISCLOSURES AND/OR CONFLICT OF INTEREST – Mayor Pierce said she has a family member on the library board and will recuse herself regarding the library reimbursement request.

V. PUBLIC COMMENT – Mr. Bill Hudson said the community needs 400 units of workforce housing. He said the Tourism Board IGA should have the ability to use the funds for workforce housing.

VI. CONSENT AGENDA

1. Approval of the August 19, 2025 Meeting Minutes

Council Member Williams moved to approve the consent agenda, Council Member Martinez seconded.

Carried.

2. Police Vehicle Purchases

Public Works Director Johnson said he has found a vendor to deliver police vehicles within three months. He said the Town has budgeted two vehicles, and they are asking for a third vehicle this year to allow the older vehicles to be auctioned off now. Council Member Williams said trucks are hard to get and it's worth fixing a transfer case to keep the vehicle that is valuable to the police. Mayor Pierce said the idle time of the police vehicles places a lot of stress on the vehicles. Council Member DeGuise said it is not good to have a vehicle in the shop all the time.

Council Member DeGuise moved to approve the additional \$90,000 to purchase three new patrol vehicles at \$270,000, Council Member Bergon seconded.

Carried.

VII. UNFINISHED BUSINESS

1. Ordinance 1015, Second Reading, Authorizing the Declaration of Fire Restrictions and Amending Chapter 21, Section 6.13.6 of the Pagosa Springs Municipal Code

Ordinance 1015 allows administrative control of fire restrictions, authorizing the Town Manager to declare and rescind various levels of Fire Restrictions within Town Limits. These actions will be completed in consultation with the Sheriff's Office, Fire District Chief, and Police Chief.

Town Council
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Council Member Martinez moved to approve Ordinance 1015, second reading, authorizing the declaration of fire restrictions and amending Chapter 21, Section 6.13.6 of the Pagosa Springs Municipal Code, Council Member Williams seconded.

Carried.

VIII. NEW BUSINESS

1. Resolution 2025-15, Authorizing an Expenditure from the General Fund of the Town for Relief of Sanitation Capital Investment Fees for the Ruby M. Sission Library Expansion Project

Mayor Pierce recused herself and left the room.

The Town General Improvement District (GID) approved the waiver of \$6,520 in CIF fees for the Upper San Juan Library District remodel and expansion project. The GID cannot waive fees without being made whole by the Town's general fund.

Council Member Williams moved to approve Resolution 2025-15, authorizing an expenditure from the General Fund of the Town for relief of Sanitation capital investment fees for the Ruby M. Sission Library expansion project, Council Member Martinez seconded.

Carried.

2. Ordinance 1017, First Reading, Establishing standards for the issuance and enforcement of Special Events permitting in the Town of Pagosa Springs

The Town has no standardized special events permitting process. Ordinance 1017 sets a standardized permitting process, providing a single point of contact and guidelines for the application process to ensure all requirements are met and proper staffing is available. Parks and Recreation Director Lewis said the special events are required to have insurance. He said this event permit provides time for the Town to contact fire, EMS, and Police about the event and allows for safety and control. He said there may be events that require additional security. Council Member Williams said the rules and regulations should be streamlined, and he said this ordinance is a solution in search of a problem when there may not be one. He said he is not in favor of the million-dollar liability insurance and the thirty-day notice to have an event. Mayor Pierce said notifying all the entities is a big plus for the town. Council Member DeGuise said there is no definition of an event, and thirty days may be too long a time requirement.

Ms. Judy Patton said the insurance, notice, and gathering numbers would restrict people's civil rights. Ms. Janice McIntyre said she is concerned about how this ordinance will affect the non-profits and events she works with. Ms. Candace Jones said limitations on speech need to be tailored, and this ordinance is not tailored. She said there are ways to give notice to other entities without an ordinance. She said a family reunion with over 25 people would require insurance. Ms. Jennifer Marsh said people are allowed to gather and protest. She said this is too restrictive and burdensome. Ms. Janna Lilly said she has First Amendment concerns, but understands there are safety issues. She recommends more time to talk with stakeholders to address safety and allow free speech. Mr. John Thomas said he understands the concerns with big events, but said the protests have been peaceful and rein in the definition of an event. Ms. Eli Fox said she has been involved in big events and has contacted EMS, Fire, and the Police Department. She said her events would not be able to meet the thirty-day requirement. Mr. Rick Holter said this would squelch the First Amendment. He said there would be lawsuits against the Town for these restrictions. Mr. Rick Bolhouse said protests are a First Amendment right, and this ordinance would negate that. Ms. Sydney McDougal said she is concerned with the number of guests and legal issues with Federal and Colorado laws. Mr. Simon Fuger said the police have been hands-off with the protest he has been involved with and coordination is useful. Mr. Bill Hudson said if the council is putting together a group to look at this ordinance, the council should invite the audience members.

Four members of the public will meet with staff and Council Member DeGuise and Williams to review the document and address concerns.

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This item is tabled until a further meeting.

3. Intergovernmental Agreement with Archuleta County Regarding Administration of Tourism Area Board, Lodgers Tax Funding, and Promoting Tourism

The Town and County share management for the Lodger tax funds through a joint IGA. Updates to the IGA have been made by representatives of both boards. Council Member DeGuise mentioned that section 3.10 does not include workforce housing. Council Member Williams said the three-year term allows members to get up to speed and make a difference on the board. He said the advisory committees provide recommendations and does not control the budget or the department.

Council Member DeGuise moved to approve the Intergovernmental Agreement with the following correction to the whereas section of C.R.S. 30-11-107.5 pertains to the operation and management of a county lodging tax 1.9% tourism fund and which restricts the use of the County's Lodging Tax of 1.9% to only the marketing and advertising of local tourism, Council Member Williams seconded.

Carried.

4. Ordinance 1018, First Reading, an Ordinance Annexing Certain Municipal Owned Property known as 1040 East U.S. Highway 160

In May, the Town purchased 1040 E. Hwy 160 for the development of a new public river access park. The property is eligible for annexation into the Town's boundary, as a Unilateral Annexation process pursuant to C.R.S. 31-12-106, allowing annexation without the need for the petitioning process since the Town is the property owner. The annexation plat will be recorded after second reading, and a zoning map will be updated in-house.

Council Member Williams moved to approve the first reading of Ordinance 1018, annexing certain municipal owned property known as 1040 East U.S. Highway 160, Council Member DeGuise seconded.

Carried.

IX. PUBLIC COMMENT – Mr. Bill Hudson said lodging tax has tripled in the last decade. He said the tourism board doesn't know if the tourists have increased or if the prices are rising. He said other needs like childcare and housing should be included in the budget.

X. MAYOR, COUNCIL, TOWN MANAGER COMMENTS/UPCOMING AGENDA ITEMS – Town Manager Harris said staff is working on the budget. He said he would like to discuss impact fees to fund capital projects. Council Member Williams said he would like to discuss franchise fees.

XI. UPCOMING COUNCIL MEETINGS –

- September 16, 2025: Regular Council Meeting
- September 22, 2025: Joint Town-County Work Session
- October 7, 2025: Regular Council Meeting
- October 21, 2025: Regular Council Meeting
- October 27, 2025: Joint Town-County Work Session
- November 4, 2025: Regular Council Meeting
- November 18, 2025: Regular Council Meeting

XII. ADJOURNMENT – Mayor Pierce adjourned the meeting at 6:37 pm.

Shari Pierce
Mayor

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AGENDA BRIEF

MEETING: Town Council - 16 Sep 2025

FROM: David Harris, Town Manager

PROJECT: Sales Tax Report - July 2025

ACTION: Council Information

ATTACHMENTS:

[Sales Tax Report - July 2025](#)

Sales Tax Revenue Report
Town of Pagosa Springs
July 2025

	Jul-25	Jul-24	Δ	% Δ
Total Town & County (County provided)	1,893,830	1,851,920	41,910	2.26%

Industry breakdown (County provided)

Categories	Difference	%
Construction	(7,547)	▼19.03%
Manufacturing	12,172	▲19.56%
Retail Trade	27,129	▲2.69%
Information	3,935	▲15.07%
Finance and Insurance	460	▲22.32%
Real Estate and Rental and Leasing	(6,019)	▼13.26%
Professional, Scientific and Technical Services	(8,031)	▼41.41%
Accommodation and Food Services	8,202	▲1.99%
Other Services (except Public Administration)	4,793	▲19.38%
Miscellaneous	7,496	▲3.49%
Total	42,591	▲2.30%

Town distribution (actual received)

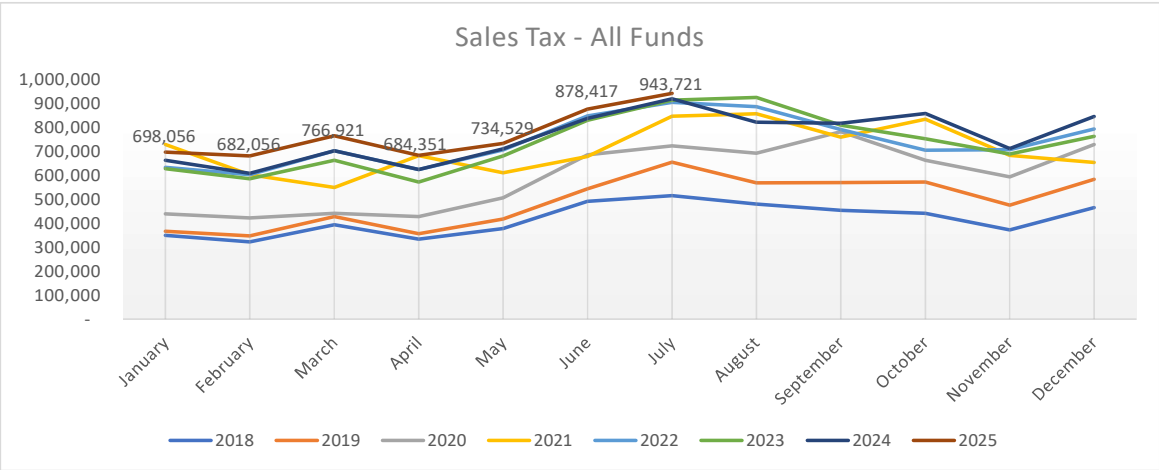
The County and Town split the total sales tax 50/50 with an adjustment made for aviation sales tax which is credited to the County-run airport. Below are actual sales tax funds deposited with the Town. It does not include Marijuana Tax which is listed below. The Town's portion is split evenly between the General Fund and the Capital Improvement Fund.

	Jul-25	Jul-24	Δ	% Δ
General Fund	471,860	460,737	11,124	
Capital Improvement Fund	471,860	460,737	11,124	
TOTAL	943,721	921,473	22,247	2.41%

Sales tax collections for the Town for the past three years has steadied.

July		
2022	906,262	
2023	916,135	1.09%
2024	921,473	0.58%
2025	943,721	2.41%

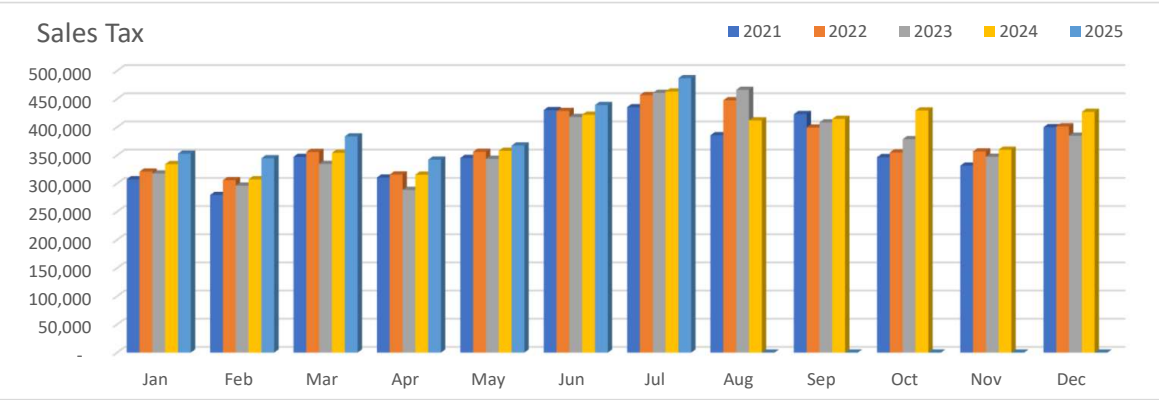
The six year history of the Town's Sales Tax collections is reflected in the chart below, reflecting the stabilization of receipts over the past three years.

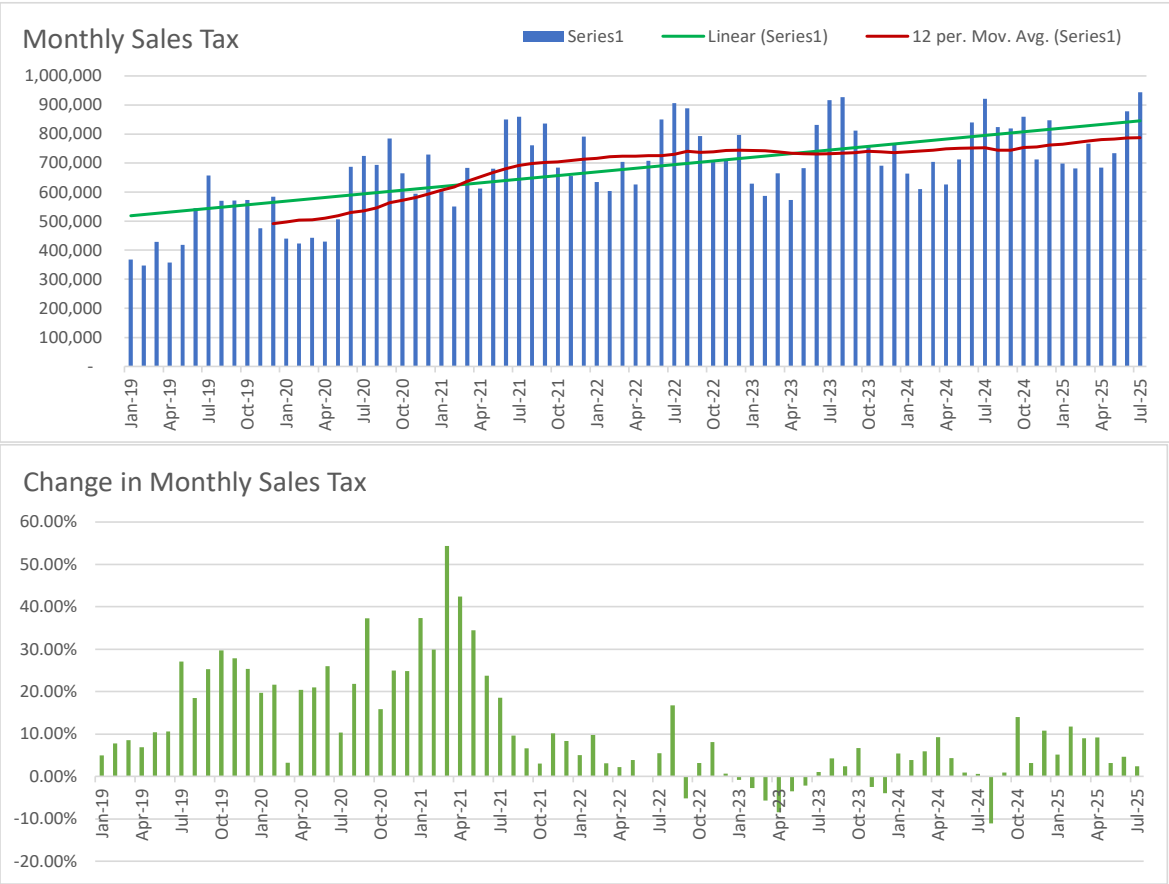


The 2025 change to the 2-year average remains flat. No changes in operations are anticipated.

	2023	2024	2025	% Δ	CPI 2025
January	629,643	664,047	698,056	5.1%	2.3%
February	587,117	610,161	682,056	11.8%	
March	664,583	703,873	766,921	9.0%	1.9%
April	573,226	626,539	684,351	9.2%	
May	682,779	712,247	734,529	3.1%	2.2%
June	831,354	839,367	878,417	4.7%	
July	916,135	921,473	943,721	2.4%	2.1%
August	926,641	823,879	-	-11.1%	
September	811,673	818,895	-	0.9%	
October	753,851	859,248	-	14.0%	
November	690,953	712,691	-	3.1%	
December	764,524	847,074	-	10.8%	
TOTAL	8,832,478	9,139,494	5,388,052		

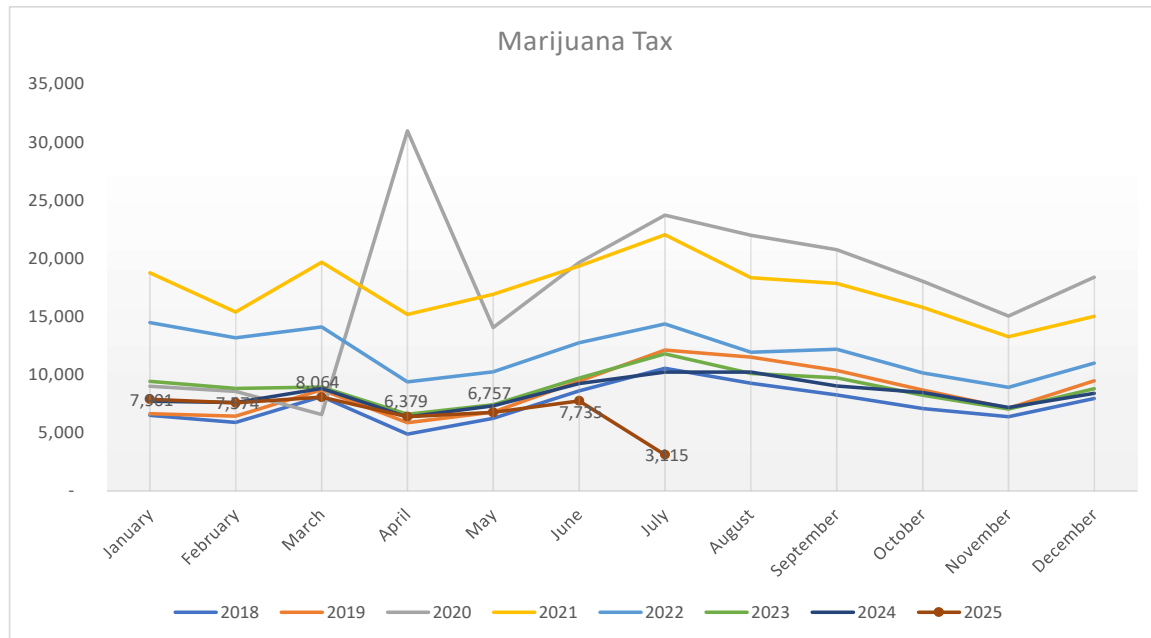
Below are three new graphs depicting the Town's sales tax collections.





Marijuana Tax

The six year history of the Town's Marijuana Tax collections is reflected in the chart below. This tax is not longer combined in the Sales Tax numbers above.



	2023	2024	2025	% Δ
January	9,425	7,726	7,901	2.3%
February	8,807	7,616	7,574	-0.6%
March	8,924	8,817	8,064	-8.5%
April	6,584	6,355	6,379	0.4%
May	7,408	7,329	6,757	-7.8%
June	9,708	9,257	7,735	-16.4%
July	11,789	10,233	3,115	-69.6%
August	10,108	10,223	-	1.1%
September	9,722	9,023	-	-7.2%
October	8,242	8,470	-	2.8%
November	7,040	7,169	-	1.8%
December	8,793	8,412	-	-4.3%
TOTAL	106,549	100,630	47,525	



AGENDA BRIEF

MEETING: Town Council - 16 Sep 2025

FROM: April Hessman, Town Clerk

PROJECT: Administration Report

ACTION: Update and Discussion

PURPOSE/BACKGROUND:

The 2026 budget is well underway, focusing on maintenance as the council's goal. Staff is hoping to present the preliminary budget to Town Council in mid-September.

Staff created new general ledger revenue accounts for use in 2025 and have completed combining the old accounts with the new ones. Staff works to provide transparency in the monthly payments by entering a detailed description in the Council's monthly payment report.

Remodeling of the Town hall is almost complete. The improvements will provide security for the staff and keep the public in the public spaces.

Staff continues to have monthly gatherings to celebrate birthdays, work anniversaries, and new employees. The core values team works hard to provide opportunities to focus on the Town's core values and put them into action.

Business License Process and MuniRevs:

Staff continues to work on processing business licenses and sending out renewal notices through the new iWorq system. There are 808 active business licenses issued within the Town, and 22 new business license applications under review. Currently, there are 99 issued vacation rental licenses, one currently in the application and approval stage, and fifteen (15) on the waitlist.

Personnel/Recruitment:

The Town is actively recruiting for the following positions:

- Assistant Judge
- Court Appointed Defense Counsel
- Police Officer

Current Staffing Numbers:

- 61 Full-time Positions - 60 Filled, 1 Open
- 10 Part-time Positions - 9 Filled, 1 Open



AGENDA BRIEF

MEETING: Town Council - 16 Sep 2025

FROM: James Dickhoff, Development Director

PROJECT: Development Department Monthly Report - September 2025

ACTION: Council information

ATTACHMENTS:

[Development Department Monthly Report-September 2025](#)



DEVELOPMENT DEPARTMENT MONTHLY REPORT

SEPTEMBER 2025

JAMES DICKHOFF, DEVELOPMENT DEPARTMENT DIRECTOR
PLANNING DIVISION / BUILDING DIVISION / PROJECTS DIVISION / HOUSING DIVISION

RECENT HIGHLIGHTS

Planning Manager

Owen Odell has joined our Development Department team as our new Planning Manager. Owen lives in Pagosa and brings his experience in Planning as well as local knowledge and established relationships with the development community and many local agencies. Owen fills this open position which has been unfilled since January 2024.

Main Street Reconstruction Project

The project progresses with concrete paving on the 100 – 300 blocks. Sidewalks are now being installed, and the middle school sidewalk is expected to be poured the week of September 15th. The geothermal line replacement is expected to be completed before October 1st when the geo heating district is turned on for the winter. The Development Director and Public Works Director continue to participate in weekly CDOT meetings and meetings with WW Clyde for performing Town improvements incorporated into and improvements occurring alongside the CDOT project. The project is currently focusing on the continuation of subsurface utility work which includes; Sewer service line repair/replacements, stormwater culverts, water lines, fire hydrants, electrical conduit for street lighting, and conduit for fiber. Middle school sidewalk replacement preparation is now underway.

Upper San Juan Water Shed Enhancement Partnership (WEP)

The Town's Development Department Director serves on the WEP Board as a Town Representative. WEP continues to effectively manage the Pagosa Gateway River Improvements Project for the Town and the project has officially begun construction. 1040 E Hwy 160 is being used for staging equipment and materials.

WEP is also pursuing an agricultural irrigation improvement project along Echo Ditch, with preliminary design work expected to start late in 2025. More details will be provided once the proposed project matures. WEP also continues to manage the Pagosa Gateway River Improvement project for the Town.

FEMA and Colorado Water Conservation Board (CWCB) Phase Two – Floodplain Mapping Updates

The Colorado Water Conservation Board (CWCB) is still progressing with phase two of a flood hazard remapping process for waterways within Town boundaries. The full phase two mapping process is expected to be completed mid-2026. The remapping project will likely result in changes to the current flood hazard maps along the San Juan River and McCabe Creek.

PLANNING DIVISION, BUILDING DIVISION, PROJECTS DIVISION AND HOUSING DIVISION REPORTS FOLLOW



PLANNING DIVISION MONTHLY REPORT

SEPTEMBER 2025
KATELYN TUNNELL / OWEN O'DELL

PLANNING DIVISION AND PLANNING COMMISSION:

Planning Manager: On September 8, 2025, we welcomed Owen Odell as our new Planning Manager. Owen brings local planning experience with established relationships with the local development community and other community organizations.

The Planning Commission held a regular meeting on September 9, 2025. During this meeting, the commission approved the Final Major Design Review for the Pagosa Bible Church located at 209 Harman Park Drive. The commission will also elected Chad Hodges to be the vice chair to fill the vacancy created by Member McCollam's resignation in late May.

The Planning Division staff has issued 8 Outdoor Commercial Establishment (OCE) permits for the 2025 season thus far. There have been 19 sign permits approved for 2025 (5 temporary sign permits and 17 regular sign permits).

The Planning Division is currently working on an addressing update involving 25 properties within town limits that are currently addressed out of sequence. This effort is intended to ensure public safety and confirm that all properties are using correct and consistent address numbers. Staff is meeting with concerned community members to ensure they are well informed about the changes made.

The Town recently hired a new Planning Manager, Owen O'Dell, who began in early September. He plans to reconvene the Historic Preservation Board in the coming months and will also be assisting with efforts to secure the Town's IDA Dark Sky designation within the next year.

Two Planning staff members will be attending the 1.5 day Colorado Western Slope Planning Conference at the end of October.

CURRENT DEVELOPMENT PROPOSAL UPDATES:

103 Majestic Drive, Pagosa Auto Rents Parking: Staff received a Final Major Design Review and Conditional Use Permit application for an auto rental parking lot at 103 Majestic Drive. The application will be reviewed by the Design Review Board at their September 23, 2025 meeting.

209 Harman Park Drive, Pagosa Bible Church: Staff received a complete Final Major Design Review application for an addition to the existing Pagosa Bible Church at 209 Harman Park Drive. The proposed multi-story addition will include a 5,800 SF main level and a 4,200 SF upper level, to be constructed adjacent to the southern boundary of the current building. This application was approved by the Design Review Board at their September 9, 2025 meeting.

140 Hot Springs Blvd., The Healing Waters Spa Resort and Spa: The applicant submitted a Sketch Major Design Review application for the phased redevelopment of the entire property. The Design Review Board approved the sketch concept plan on July 23, 2024. Subsequently, the applicant requested and was granted a one-year extension at the June 24, 2025 Planning Commission meeting.

105 Country Center Drive, Electric Vehicle Supercharging Station (EVCS): Staff received a complete Design Review application for the paved parking area at 105 Country Center Drive. The applicant is proposing the installation of supercharger cabinets, charging posts, a switchboard, a utility transformer, a meter, and pole-mounted luminaires. The project will utilize 10 existing parking spaces at the site. This application will be reviewed by the Design Review Board on April 22, 2025. No word when the project intends to break ground.

Pagosa West Sketch Major Subdivision Application: Staff received a complete Sketch Major Subdivision application for the 100-acre vacant land located on the SE corner of S. Pagosa Blvd and Hwy 160. The vacant land is comprised of 3 total parcels. The applicant proposes commercial and residential housing. The application was considered at the Planning Commission meeting on March 25, 2025. The application was continued and is expected to be resubmitted with revisions and considered at a Fall Planning Commission meeting.

232 Pagosa Street, Eagle Mountain Mixed Use Project: The applicant has submitted a request for extension of their Final Design Review approval by July 2026 due to the potential conflict with the Main Street reconstruction project. The Planning Commission approved the requested extension on December 10, 2024. There are no changes to the previously approved development proposed.

2911 Cornerstone Drive, Circle K Stores: Town staff have not heard back from the design and construction team in 6 months and are currently uncertain if this project is moving forward.

600 W. Highway 160, Pagosa Views PUD: The applicant is now expected to move forward with their subdivision application process in the 3rd Q of 2025, for consideration by the Planning Commission and subsequently by the Town Council. The recorded PUD agreement for the 80 acres just west of the Elementary School includes a mix of up to 675 housing units, to include 78 deed-restricted workforce units, along with 144 lodging units and recreational and commercial level amenities. Subsequent applications would include Major Design Review for each phase.



BUILDING DIVISION MONTHLY REPORT

PREPARED SEPTEMBER 2025
From: Tim Hatch, Building Official

Building Division Permitting and Activity

The Building Department continues to work on the mandated and recommended adoptions of two new State codes as well as updating and amending our current international building codes to the 2024 cycle of the International Code Council (ICC) codes: The State of Colorado Wildfire Resiliency Code (CWRC) in combination with the **2024 International Wildland Urban Interface Code (IWUIC)** and the **Colorado Model Electric and Colorado Solar Ready Code** are now required by the state to be adopted with the passing of HB23-166. The new State legislation was put into law July 1, 2025, forcing the adoption of their codes as well as updating our codes to a more current code cycle. The ICC codes we will present to amend and adopt include the 2024 versions of the **International Building Code (IBC)**, **International Residential Code (IRC)**, **International Existing Building Code (IEBC)**, **International Energy Conservation Code (IECC)**, **International Fire Code (IFC)**, **International Mechanical Code (IMC)**, **International Fuel Gas Code (IFGC)** and the **International Swimming Pool and Spa Code (ISPSC)**.

A daunting challenge with amending and adopting all these codes is figuring out the significant code changes and the impact of the eight ICC Building Codes ICC for each code cycle from 2015 to 2018, 2018 to 2021 and 2021 to 2024 and the Colorado Wildfire Code. The adoption consideration dictates reviewing the new 2024 ICC codes and considering local amendments as needed.

We are required to adopt or update the building codes by April 1, 2026, and they must be fully implemented by July 1, 2026. It's important to note that if we do not meet this deadline, we will be mandated to adopt the Colorado Model Green (Carbon Reduction) Code. The Model Green Code would eliminate the use of fossil fuels entirely, meaning all new homes constructed would be required to use electricity for heating, generated by either solar power or LPEA electricity.

We are in the process of forming a Code Adoption Committee consisting of the Town and County Development departments, Pagosa Fire Protection District Springs fire department community and development professionals to provide input, expertise and help with amending all the codes. It is my opinion as well as the International Code Council's opinion, code amendments and adoption should be a community decision as well as the governing jurisdictions to decide and adopt the codes. Community involvement helps the contractors/builders accept and comply with the codes we adopt. They are experts and can provide a ton of history and knowledge of the challenges when constructing in the area. I am very hopeful they can help take some of the burden from the development departments. Ultimately, it is Town Council and BOCC to decide what codes and amendments we adopt.

Per State statute, governing jurisdictions that adopt land use/building codes are required to create a Board of Appeals. We are in the process of forming that board of Appeals Board consisting of five qualified members from various aspects of the development community including an Architect and one alternate Architect, Engineer and one alternate Engineer, one contractor/builder and two citizen members who cannot be associated with the building industry.

It is apparent due to high interest rates, uncertainty about the economy across the country and change in permitting processes, the numbers for permitting are down.

Building Department Activity

		June	July	August	Year to Date
Building - Plan Review/Permits		5	14	7	49
Building – Inspections		15	41	39	209
Building Permits - Commercial		4	3	4	17/21
Building Permits - Residential		2	7	3	24
Business License inspection					
Vacation Rental Inspection					

Building Permits by Type

Type of permit	Current Month	Year to Date	Same period by year		
			2024	2023	2022
	AUG	2025			
Commercial New and Additions	1	6	0	8	7
Commercial Other (Demo/Mech)	0	3	4	8	20
Commercial Repair/Remodel	3	10	4	12	17
Residential Addition/Deck	1	4	8	7	5
Residential New home/garage	0	7	7	11	21
Residential Other (Demo/Mech/Solar)	2	8	12	16	21
Residential Repair/Remodel	0	4	7	5	6
Total Building Permits	7	42/49	556	79	101
Total Project Valuations	136,900	* 9,070,897	19,997,575	55,459,731	13,822,049

*\$3,500,000 of the valuation is the library project

Notable New Commercial Building Permits Issued During July:

- Coffee Roasting Kitchen, 2362 Eagle Dr. (Contractor-Owner) 497 Change of use and occupancy classification of the existing 497 sf. building. Converting the Quonset building into a coffee roasting kitchen.
- Tesla Charging Station, 100 Country Center Dr. (Contractor TBD) Installation of 8 new charging stations in the Country Center Plaza shopping center.

Commercial/Multifamily Active Building Permits:

- Casa at Two Does, 320 Hot Springs Blvd. (Contractor -Owner) Phase 2 which includes 5 new structures at 448 sf. each for a total of 2,240 sf. We have issued a Foundation only permit. We are waiting on structural drawings for the structure and a plan for returning the geo-thermal water back to the river. There are other planning issues as well.
- Nylund Dental, 2363 Eagle Dr. (Contractor-Owner, R&A) 2363 Eagle Dr. Change of use and remodel of 1,770 sf. building. Demo is complete, trade work has begun.
- Brad Ash Office Remodel, 262 Pagosa St, (Contractor-Owner), Should be nearing completion.
- Ruby Sission Library/Upper San Juan Library, 811 San Juan St. (Contractor FCI Construction) Contractor has mobilized, installed fencing and constructed temporary separation wall between the addition and existing space.
- Pagosa Peak Family Dentistry, 2737 Cornerstone Dr. (Contractor-Trinity Construction) Framing is nearly complete.
- Timberline Apartments, 2911 Cornerstone Dr. (Contractor-Watermark Commercial Contractors), 135 Legacy, 50 dwellings. **This project is still very high maintenance!** The sequence of inspections has been a major issue. In their defense, they had to pull a lot of permits for each building individually. Many of the permits are for the same scope of work but from different agencies. The two buildings are in the finishing stages. They pouring curb, gutter and sidewalks.
- Springs Resort, Prefabricated Sheds, 331 Hot Springs Blvd. Two of three units planned have been set. There is an unpermitted project on site that could hold this project up. They are remodeling the old spa building, turning the building into a huge laundry room. The laundry building was unpermitted.
- Walmart remodel, NO CHANGE (Contractor-Tristate General Contracting) 2011 Aspen Village Dr. Permit has been issued.
- Quality Inn, NO CHANGE , 174 Hot Springs Blvd. (Contractor-Whispering Pines) We have met with the owner to discuss progress. The fastening of the drywall to the ceilings in the existing building has been completed. The addition project in the south building is nearly complete. Working towards getting their final electrical inspection. They will have a little drywall work in a mechanical room and an HVAC unit to trim out and make operational. The owner was informed of potential fees to extend permit.
- Colorado Garden Company, NO CHANGE, 23 Pike Dr. (Contractor-Owners) Many building violations have been corrected or removed. The violations were mostly unpermitted work. Some conditions were high hazard. 750 sf. Deck demo to start soon. TCO was issued. Deck will be closed until it is reconstructed.
- 802 Rosita St. NO CHANGE, (Contractor-Custom Comforts) This project was permitted as a Residential (IRC) remodel; however, the correct occupancy is commercial R-2, proposed use is *congregate living*, not single family residential. Revised stamped plans and change of use with a code analysis were submitted to the Development Department for review and were approved. The remodel work of the structure is nearly complete. Site work on the retaining walls has not begun. Not sure why they have not requested final inspection.
- Parish Hall NO CHANGE, (Contractor-Dutton Creek), 451 Lewis Street



PROJECT DIVISION MONTHLY REPORT

SEPTEMBER 2025
KYLE RICKERT, PROJECT MANAGER

Middle School Sidewalk Improvement

The Middle School Sidewalk replacement is currently under construction with WW Clyde as part of the Main Street Reconstruction Project. The Town has been granted the Revitalizing Main Street (RMS) grant for the proposed sidewalk enhancements along Pagosa Street, adjacent to the Middle School. This grant allocates \$250,000, requiring a 10% contribution from the applicant. The project aims to encompass the replacement of the sidewalk spanning from the middle school to the Hwy. 160 curbside, alongside the incorporation of various amenities including new tree boxes, benches, a bus stop, trash receptacles, bike repair station, light posts with flower basket hangers and banner holders. All existing trees from the middle school block were moved to the Town Park Athletic Field and Yamaguchi Park.

400 Block Sidewalk Reconstruction

Street trees were removed with most of them being transplanted in the Town Park Athletic Field and Yamaguchi Park. Two trees were too tall for safely removing or transplanting, thus those two were cut down. WW Clyde and our Parks staff coordinated this effort. New mature replacement street trees were reserved in the fall of 2024 and will be planted in the new, to-be-constructed tree boxes potentially by the end of in 2025.

The reconstruction of the 400-block sidewalk is expected to occur in October 2025.

Main Street Reconstruction Project

On April 1, 2025 the Town Council approved a number of improvements along and adjacent to main street to be completed by WW Clyde, including the 400-block sidewalk, middle school sidewalk, sewer service line replacements, fire hydrant installation, S. 8th, S. 7th, HSB, intersection improvements, 2nd Street drainage improvements and reconstruction of S. 5th Street to Centennial Park.

The Town's expensed of work within the CDOT project includes: landscaping, geothermal line replacement and relocation, new street lighting, fiber conduit, to name a few.

Additionally, the Piedra Road/Hwy 160 crosswalk project will be incorporated into the broader Main Street Reconstruction Project contract, with construction occurring in 2026.

First Street Pedestrian Bridge – Design/Engineering Phase

The Field Investigation Review (FIR) will be scheduled with CDOT soon to review the 30% plans from Davis Engineering for the bridge abutments and river trail connection. After all issues are addressed in the plans and finalized, we will be submitting a 25% down payment to BCS Fabrication to initiate the Pratt Truss style bridge fabrication. This expenditure is anticipated to occur in Fall of 2025. Project construction is projected for Spring 2026.

Pagosa Gateway River Project

The Pagosa Gateway Project, aimed at enhancing the river ecosystem and improving water quality, started at the beginning of September, under the oversight of the Watershed Enhancement Partnership (WEP). FlyWater, the contractor, has obtained permitting, a riparian health assessment, river surveys, endangered species surveys, cultural resource survey, identified and pre-ordered a portion of the required containerized plantings, organized meetings with all property owners along the project reach, and concluded three public comment periods. The Pre-Construction meeting occurred Wednesday, Aug. 13th for this project and private landowners and stakeholders were updated on project details, plans, and where information will be available during construction. The project has already utilized the Town's obligated \$54,000 match for this project.

This project's design was based on the inclusion of improvements received during three public comment and engagement opportunities. In an effort to include all improvements without reducing the scope of the project due to the limited budget, staff applied for and was awarded an additional \$292,222.00 from the Colorado Water Conservation Board, utilizing existing grant awards for required matching funds to cover the expected additional estimated cost.

As part of the requirements for the Colorado Water Plan (CWCBC) Grant, WEP, in partnership with the Town, has selected a bid for Barr Engineering to design and implement an environmental monitoring plan for a five-year period. This portion of the project will commence before the beginning of the construction slated to start in September 2025. Barr Engineering's proposal for the monitoring was \$87,800 and will be covered by the Colorado Water Plan (CWCBC) Grant. Fish monitoring will also take place every other year by Colorado Parks and Wildlife as part of the monitoring requirements.

Yamaguchi South River Improvements Project

The Yamaguchi South River Improvement Project aims to enhance stream and river access for recreational and ecological purposes. It will also improve the water irrigation system for Yamaguchi Park, including a new in-stream rock diversion structure with headgate and an open water delivery ditch to an adjacent wetland pond that will be used for irrigation water storage and wetland pond habitat. The Town has secured funding for this project through grants from the Colorado Water Conservation Board (CWCBC), Southwest Water Conservation District, Archuleta County, and Town matching funds.

Surveys, biological assessments, 100% designs plans, and final project budget estimates have been completed to date. Two public meetings have taken place and comments received have been used to inform the final design. The project is scheduled to begin in Fall 2025.

Skyrocket Trailhead

The Town owned parcel at 229 US HWY 84 #A (Goodman's property) is being considered as a location for Skyrocket Trailhead. The Park would include a Trailhead marking connection trail that accesses the Reservoir Hill trail system. A way-finding kiosk, interpretive signage, ADA-accessible picnic areas, fencing, and parking lot improvements would be the starting point for the first access to Reservoir Hill from the US HWY 84 corridor. 8-acres of fire mitigation on the north-east side of Reservoir Hill is also being proposed as part of the project. We are looking to seek funding from the Conservation Service Corps Grant, which would provide the labor from the CO Youth Corps Association in partnership with GOCO. GOCO will be letting us know about the results of the award for this grant in December 2025.

Town-to-Lakes: 10th St to Great West Ave

The Town was awarded Congestion Mitigation and Air Quality (CMAQ) Improvement Program funds for the design and construction of the Town to Pagosa Lakes Trail segment, spanning from 10th St to Great West Ave. These funds were granted as part of the last available funding through the CMAQ program in late 2019, as the CMAQ program no longer exists. The Town was awarded \$662,320 in funding with a local match obligation of \$137,680. This project involves the design and construction of a twelve-foot-wide asphalt or concrete non-motorized shared-use path between 10th Street and Great West Ave.

The Town is seeking Town Council approval to apply for a Colorado Parks and Wildlife Non-Motorized Trails Grant that could award up to \$250,000 with a 25% match towards the construction phase of the new trail segment. This could help fill in the gap of construction expenses and expedite starting the project while Pagosa Views coordinates their plans to develop their property.

Site surveys are completed, and trail design and engineering is currently on schedule to be at 100% in 2026. A Field Inspection Review (FIR) meeting has occurred with CDOT to review the 30% design plans and seek direction from CDOT for plan revisions. Staff and our consultant will use CDOT's feedback to inform the subsequent design considerations. Construction may commence during the 2026 construction season. This project is funded with federal funding, thus progress will be determined on the continued availability of the awarded federal funds.

East Gateway River Park Project

The Town awarded phase one of the project to Southwest River Engineering in August. The Town officially purchased the property located at 1040 E. Hwy 160 on May 5, 2025. The primary purpose of the first phase of the project is to develop a multi-phase conceptual design for the park and phase one portion of the construction. Phase one will include removing existing structures, cleaning the site, design improvements, constructing boat access, minor parking improvements, and potential landscaping. Phase two is anticipated to include the construction of restrooms, changing rooms, shade structures, and paved parking. Phase three is anticipated to include construction of the riverwalk trailhead with additional educational signage and riverwalk connectivity to the existing ADA-compliant paved trails upstream and downstream, a handicap accessible fishing pier, and final landscaping treatments. Initial funding for the 4.315 acres land purchase and phase one of the project was provided by the Land & Water Conservation Fund (LWCF) and GOCO. A public meeting is being held on September 9th to gather public and stakeholder input on the project and answer questions relating to the design and timeline.

San Juan Historic Museum

The Town is applying for a History Colorado Grant in October 2025 to potentially be awarded up to \$250,000 with a 25% match. The proposed work would replace the roof on the historic Water Works Facility and do structural reinforcement of the rafters and metal beams inside the building. It would also include completing the stonework on the existing retaining wall on the south side of the Rumbaugh Stone Arched Bridge and create a wing wall on the north side of the bridge as well. Results from the grant application will be posted in December 2025.

Stairway – Senior Center to Riverwalk

The Town has been awarded \$4,000 in funding from DOLA – CO Main Street AARP sponsorship for this project. The current stairs behind the Senior Center that connect down to the Riverwalk Trail will be replaced with concrete stairs with a landing at the top and bottom. The stairs will have two handrails as well. The design is currently being worked on by Davis Engineering and bids will be evaluated for the project for a local contractor to do the construction in 2025.

Regional Workforce Center

The Town of Pagosa Springs has been awarded \$600,000 in Community Development Block Grant funds through the Department of Local Affairs to support the construction of a Regional Workforce and Technical Training Center being managed by Build Pagosa. This new facility will be located on property owned by the Archuleta School District and will serve as a resource for the school district and regional partners. It will be equipped to provide technical training in a variety of trades, contributing to the development of the future workforce. The design phase of the project is set to be finalized in early 2026, with construction to start later that year. Build Pagosa has selected a firm for the RFP for design & engineering and are currently under contract negotiations.

CALSTART Clean Energy Strategic Plan

Staff is working with the non-profit organization Four Corners Office for Resource Efficiency (4CORE) to collaborate on the development of a zero-emissions mobility plan for the greater Pagosa Springs area. In collaboration with Archuleta County, Pagosa Springs Community Development Corporation, and Town, staff has completed gathering existing conditions data for advancing the project to the next phase. This initiative aims to deliver an actionable clean transportation and mobility plan for the community, serving as a valuable resource for pursuing future funding opportunities related to sustainable transportation in the greater Archuleta County region.

4CORE has secured a \$135,000 grant to support the creation of this plan and is seeking Community-Based Organizations (CBOs) to assist with current condition inventories and community outreach efforts. The Town, Archuleta County, and Pagosa Springs Community Development Corporation (PSCDC) have been identified as potential CBO partners to coordinate these efforts. Compensation for participation will be provided through the grant funding, with \$50,000 in revenue to be shared equally among the Town, Archuleta County, and PSCDC. An online survey has been completed that gathered the resident, visitor, and business feedback necessary to develop an assessment report that will inform the creation of a detailed Mobility Service Proposal. Training will take place for the project in October 2025 and the Mobility Service Proposal will be drafted around the same time.



HOUSING DIVISION MONTHLY REPORT

August 2025
JEFF SAMS, HOUSING COORDINATOR

Housing Action Plan (HAP)

The Housing Needs Assessment was completed and adopted by both the Town and County in April 2025. It showed a need for 362 Units to catch up with current demand and a total of 1316 units needed by 2035. The Housing Action Plan is our next step for compliance with SB24-174. The county was awarded a grant to hire a consultant to complete the Housing Action Plan for our entire community. That contract has been signed by the County, and we have started with an initial meeting with consultant. Regular meetings are scheduled, and we are moving forward with scheduling Public Meetings and Work Group meetings to gather feedback to formulate the plan. The project is expected to take 6 to 9 months.

Workforce Housing Guidelines

The Workforce Housing Guidelines being drafted by Jennifer Kermode of Kermode Consulting, LLC continue to progress. We completed our stakeholder work sessions on March 17th and 19th. Key stakeholders attended those with representation from the Town and County. There was great progress made towards identifying key goals around workforce housing to guide the completion of this document. The purpose of the Guidelines is to provide direction for deed restricting units based on the totality of public incentives provided to individual housing projects, ensuring long term affordability of workforce housing units. The Guidelines will be referenced by Town and County officials, Other Government Agencies (including state agencies and those working on Prop 123), Developers, those looking for housing, etc. The consultant has completed the final draft, and we are working towards scheduling presentations to the Town Council and the Board of County Commissioners for adoption.

Land Banking

The PSCDC Land Banking application to purchase 11 lots currently owned by the county in Chris Mountain II has been withdrawn.

Projects Underway

- Timberline Apartment LITCH project located at 135 Legacy Drive next to Walmart is making good progress on the 50 units. Following the completion of this project, the developer is planning on submitting a LIHTC application for a second project of 50 units following completion of their current project. The projected rental range is broad, which helps us hit multiple income ratios in the lower income brackets, with units serving 30%-80% of AMI (averaging below 60% of AMI). Recent updates from the developer stated they plan to start pre-leasing in December of 2025.
- **Phase 1 CDC Chris Mountain Work Force Ownership Housing.**
The first two houses closed on February 20th. We have sold an additional 2-bedroom home in May, and one 3-bedroom home was also sold in May. The last 3-bedroom home closed on July 24th and another 2-bedroom home is under contract. A 7th house closed in September and an 8th is now under contract. This leaves two homes left to sell. A current buyer is expected to be under contract early next week. Homes are now listed in the MLS to get more exposure and reach more potential buyers.

Potential Developments

- Pagosa Views is still working towards submitting subdivision applications to get their project approved.
- Servitas continues to work on finding a financial model that works. Recently, Servitas has re-engaged to review other Grant options and review other financial models that could fit that do not require a financial commitment from the town.
- Colorado Outdoors, LLC is looking to move forward with their proposed middle income (60- 140% of AMI) apartment rental project east of the Pagosa Springs Medical Center. The developer is revising their subdivision sketch application for future Planning Commission review. The Commission voted for a continuance on their first submittal, allowing the Developer to make some changes. The second presentation still has not been scheduled. The Town received a \$2 million DOLA More Housing Now grant that will be used towards the costs of the public infrastructure needed to serve the housing project.
- Looking at other construction options for Single Family homes in Chris Mountain for future Phases. Meetings with Vederra Modular to review options and pricing to see how that would fit for a housing project. Working towards some final pricing to give a full review of the project and compare it to traditional construction. Other alternative building methods are continuing to be reviewed to reduce construction costs and increase eligibility for Grants and other funding options.
- Met with a new developer that owns property in Archuleta County and they would like to build approximately 70 units. They have some preliminary drawings of a 10-building apartment complex with a mix of unit sizes. They are still in the initial design phase but working towards a final plan and identifying what grants to pursue. I have continued to meet with them to review options. The HDG grant they were reviewing did not bring enough funding for the project so we are looking for other options to create the capital to complete the project.

Other Work in Progress

Continued attendance at meetings with Region 9, DOLA and other Prop 123 groups to stay abreast of current programs, funding opportunities and successful housing project examples It helps to keep up with changes and what is going on in the industry. There are frequent meetings and presentations to review grant opportunities and requirements for current state initiatives that involve housing.

Continued attending C.A.S.T. (Colorado Area Ski Towns) Housing Task Force Meetings. This group has had a big focus on Workforce Housing.

Continue to review alternative construction methods, mostly focused on modular construction. This includes some regional builders and local General Contractors. Another company with a similar product out of Delta has also reached out. We have also had additional inquiries from other “innovative” Construction companies. A modular builder out of Oklahoma has discussed options to provide affordable housing. They have a local general contractor that they work with. There is also a local general contractor that has approached us to use SIP Panels for construction.

Reviewing Childcare needs in our community to potentially incorporate into future developments. There is a push from the state to incorporate childcare into new developments, and it increases your “scoring” when evaluated from grants. Discussed need with Laura Mijares at the Early Childhood Council of Archuleta County. She asked me to present to their board, and I attended and asked for their assistance to help identify an owner for a new facility as well as helping to address how we staff that new facility. We also discussed the need for ongoing funding.

Working on completing requirements to have the town certified as an ADU Supportive Jurisdiction with the state. All information on codes, waivers and other requirements have been reviewed and discussing with representatives at the state to confirm compliance. The goal is to be eligible for additional funding and add additional rental units to that would fit our workforce.



AGENDA BRIEF

MEETING: Town Council - 16 Sep 2025

FROM: Jennifer Green, Executive Director

PROJECT: Lodging Tax Report

ACTION: Update and Discussion

PURPOSE/BACKGROUND:

TOURISM BOARD MEETINGS

The Tourism Board held its most recent regular meeting on Wednesday, September 3rd at 4pm at Town Hall. The next regularly scheduled meeting will be held on Wednesday, October 1st at 4pm at Town Hall.

TOURISM BOARD INFORMATION

The google drive folder featuring all materials related to the Tourism Board continues to be updated. The folder includes a variety of information, such as meeting minutes, contact information, brand overview, marketing plan, budget, research, bylaws, data, statewide research, mission statement and much more.

https://drive.google.com/drive/folders/12Cy6vSyq_8oF5_nEMsG0tfe8aZgPV3Hu?usp=sharing

LODGERS TAX FINANCIAL REPORT

Town lodging tax collections are due on the 20th of each month, following the month of collections. Reports from the Town are usually available at the beginning of each month. July collections have missing collections and a glitch with the Town's online payment system.

July 2024 indicated a large payment that was due in March 2024. For 2025, Town finance team is once again crediting the payments for the month they are due and not when they are received. Additionally, one property that reported a decent amount was sold and is now workforce housing. While 2025 town lodging tax shows a large decrease, it is not an apples to apples comparison to 2024. July shows a 9.98% decrease compared to 2024, or \$12,148. Year to date shows an 8.42% increase, or \$42,301. The spreadsheet has been updated with all payments through July.

Q1 County collections reflect a 15.8% increase, or \$18,344. Combined Q1, reflected an 11.65% increase, or \$35,988. Q2 for Town collections shows an increase of 19.57%, or \$36,805. Q2 County shows a 10.64% increase, or \$11,288. Total Q2 collections between town and county shows 16.35% increase, or \$48,093.

The full detailed report is available through google drive:

<https://drive.google.com/drive/folders/1VCvv4F3PFlixRkzwkXxmdAMoVS-9Ksrp?usp=sharing>

BLUE ROOM RESEARCH

The most recent report through Blue Room is in the 2025 data folder on google drive:

<https://drive.google.com/drive/folders/1BhAKSC8LD5zdX2ZogJX1oJK17RSDZm9o?usp=sharing>. The report has been included in the packet. The report does not include July lodging tax until we have more accurate information.

VISITOR CENTER UPDATE

The Visitor Center lobby is open 7 days per week from 10am - 4pm. We aim to be open 362 days a year, closed only on Thanksgiving, Christmas and New Years. Continuous promotion of the app across all channels helps complete the virtual operations. We currently have two part time staff ensuring hours of operation and one very part time filler; Director manages day to day operations and is on call 7 days a week for any issues that arise. We have seen strong app usage.

The recent monthly report in the data folder. Visitor Center staff is actively encouraging visitors to download the app for alert information, parking lot "tour" and scavenger hunts.

STAFFING UPDATE

The Tourism Department currently has three (3) full time employees: Director, Marketing Manager and Administrative Assistant, plus 2 part time visitor center employees and one bonus very part time person to help fill in weekends, holidays and summer. All employees report to the Director and the Director oversees all activities, projects and manages visitor center operations. Director is taking on a lot of additional work in order to keep the rest of staff okay. Based on discussions during the joint budget work session, staff is proposing one additional full time employee in 2026 for overall tourism needs.

VISITOR EDUCATION / FIRE UPDATE

The Tourism Department continues to promote Stage 2 restrictions to visitors. Visitors do not know annexation lines and we want to ensure they are aware fire danger is extremely risky. We have all materials ready based on current situation - posters (Visitor Center doors with current restrictions and smaller posters for Stage 2 specifying what is and is not permitted), video PSAs and Thank You Firefighter yard signs as needed. We keep these printed and ready to switch out, so that we can quickly adapt as needed. We are also extremely cognizant of any social media posts from Visit Pagosa Springs during an active fire. The recent moisture has been welcomed, but much more is needed.

CONSTRUCTION PLANNING / MESSAGING

Tourism staff has distributed all of the temporary people moving signs currently in place, with more for parking lots and other high traffic areas. The aluminum pedestrian signs are printed will be installed by other town departments. Staff is ready to adjust temporary signage as road closures are anticipated to change in the next few weeks. Director is presenting to the middle school on Tuesday, September 2nd with CDOT PIO team. The goal is to educate on safe pedestrian access. A future meeting with the elementary school is anticipated. Director continues to work closely with CDOT PIO on anything tourism can assist with during the construction "disruption." Upcoming sign / sidewalk decal movement is anticipated based on project needs. Staff will be ready to assist as needed. Director has been involved in recent requests and meetings with sign stakeholders regarding additional business signage. Additionally, Director is joining CDOT team on Tuesday, September 2nd to speak with the middle school students about construction safety.

SOCIAL MEDIA UPDATE

- Facebook - www.facebook.com/visitpagosasprings: 40,223 followers
- Instagram - www.instagram.com/visitpagosa: 26,914 followers
- Twitter / X - www.twitter.com/visitpagosa - 2,193 followers
- Youtube - www.youtube.com/visitpagosa - 1,580+ subscribers; 685,023 video views
- TikTok @visitpagosa - 3,863 followers, 21k likes

All detailed social media data can be reviewed in the google drive by month:

<https://drive.google.com/drive/folders/1U7dqMzDtK4YsLLSVySGWHeQqe1Qb1Fw?usp=sharing>

Paid Meta campaigns currently running include: (2) event carousel with events through December, and (3) launching week of 9/1 fall video. Campaigns are being constantly evaluated to maximize results. Blog promotion will begin soon in the paid Meta mix.

RECENT & UPCOMING PROMOTIONS

The 2025 Marketing Plan and advertising schedule can be found at:

<https://drive.google.com/drive/folders/1MjwPBL1yklxFtMoJ8sFtWVOWykPWwlqL?usp=sharing>

We currently have ads running through YouTube and Meta through August. In early September, our fall ad campaigns will begin. Youtube ads are seeing 15%+ click through rate and paying \$0.01 - \$0.02 per click. The ad placement schedule has been updated with everything committed thus far. Fall and early winter campaigns have not yet been committed.

Alamosa and Pagosa have begun to work on 2025 CTO grant, to launch late summer / early fall. The 2025 grant focused on international tourism efforts in UK and German-speaking markets. While international travel is down in the US due to many factors out of our control, the UK and German-speaking markets are still booking and traveling. Colorado is typically the 4th visit to the US (NY, FL and CA and National Parks are typically the first few visits). Colorado's international visitors are experienced US travelers and are not as impacted by political changes or other concerns. The most impacted international markets showing strong declines are Canada and Mexico, neither are key international markets for Pagosa.

The sponsored content "template" ad for the Colorado State Vacation Guide is due to the Miles team by the end of September. For the 2026 guide, there are now 4 different templates to consider, versus only 2 in 2025. The CTO has moved the State Vacation Guide away from an ad heavy publication to more of an editorial / advertorial concept over the last 3 years. Director has negotiated a decrease in cost (\$15k for 2026) and also an extended deadline for the end of September. We were asked to provide materials by September 8th initially.

2026 CTO MARKETING GRANT

For the 2026 CTO marketing grant, the Tourism Board approved the change in direction to focus on domestic and highlighting the 250/150 events during the August 6th meeting. The grant application was submitted on 8/28. The application proposed creating a Southern CO Heritage Trail with Alamosa. The plan is to create storytelling video assets, promote video through CTV and paid Meta efforts. Award notifications are announced in early November. The grant proposal was for the max amount of \$74,000, including a \$12,500 match from each destination. The campaigns will target shared domestic audiences and aligns closely with the State's focus on 250/150 promotions.

PRESS & MEDIA RELATIONS

All media tracking can be found at: [https://docs.google.com/spreadsheets/d/1d1pXYOK_IUk6dxSps9b9GRv`NJ2\\_-4UNh5XLrVzFIs2g/edit?usp=sharing](https://docs.google.com/spreadsheets/d/1d1pXYOK_IUk6dxSps9b9GRv`NJ2_-4UNh5XLrVzFIs2g/edit?usp=sharing). We have recently hosted quite a few media / trade. We were also recently featured in Forbes: "[Four Awesome Colorado Hot Springs Adventures](#)". This article was the result of the ongoing promotion of the Hot Springs Loop, which Director was a lead in creating 10+ years ago. While we were not asked to host the writer, Pagosa was one of 4 destinations featured. Basically, "free" coverage. Forbes has a potential audience reach of \$56M.

DESTINATION BLUEPRINT

Staff continues to work with website vendor on adding Business Resources and Blog feature on website. Director presented to Rotary on August 7th.

SIGNAGE

Director is currently working with various Town departments on new construction signage, river access signage, PARC on their overall signage efforts, post-construction community-wide wayfinding signage (paused in 2019), geothermal building interpretive signage, and more. The proposed budget for signage has been increased for 2026, based on the current amount of requests.

CERTIFIED PAGOSA PARTNER & TOURISM AMBASSADOR PROGRAM

Director (and Mary Jo Coulehan) provided training to all of Town staff on September 10th and about 30 Wyndham staff will be trained on September 16th and 18th. We are using 2025 to roll out overall program. One role of a new staff member would be help grow this program.

2026 BUDGET

A draft 2026 budget was presented to the Tourism Board during the September Board meeting. While there was recently a budget provided by the lodging association, the work session held on August 6th with the Tourism Board, members of Town Council and members of the Board of County Commissioners guided staff's recommendations. Much of the budget provided by the lodging association was focused on marketing. Staff will present a more detailed marketing plan in December. The November meeting will review the 2025 visitor audience to help drive 2026 marketing plans. The Tourism Board will discuss goals for 2026 event funding during the October 1st meeting.

ATTACHMENTS:

[Visit Pagosa Springs - Research Update - July 2025 Review](#)





U.S. Market Review

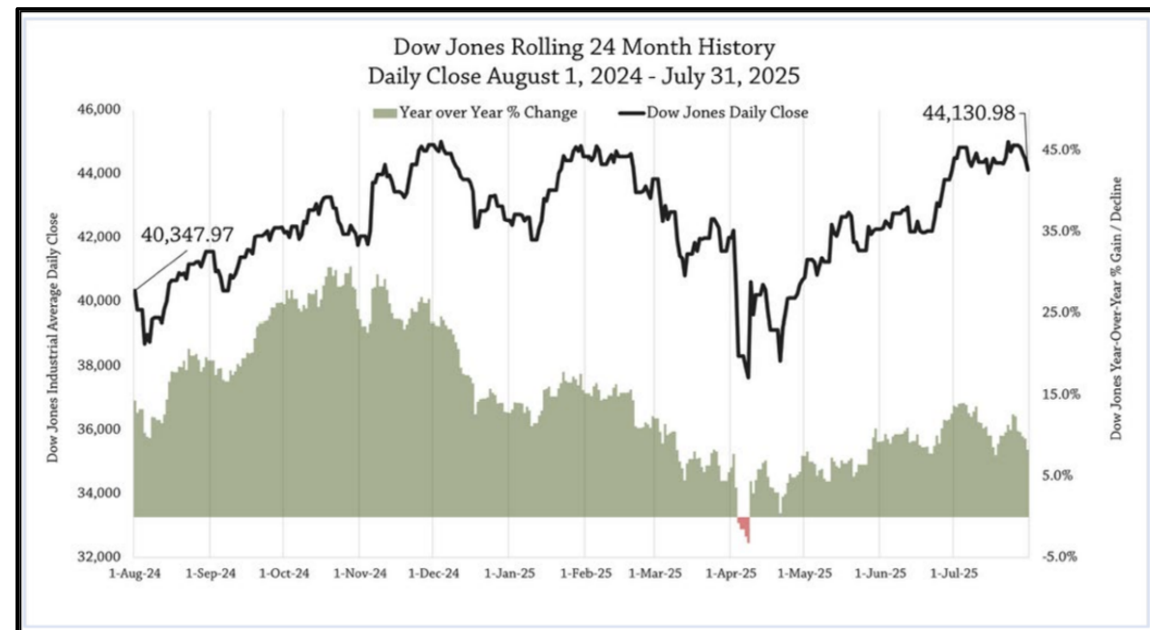
U.S. Market Review



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The Dow Jones Industrial Average

- “The DJIA increased very slightly in July following strong gains in both May and June, with the index climbing just 0.1 percent, or 36.21 points, to finish the month at 44,130.98 points.”
- “Strong corporate earnings and a few trade deals helped bring positivity to the DJIA, while concerns about outstanding trade tensions with some major partners, worries about inflation, and jobs data created dynamic tension that kept both growth and decline in check.”
- “The Dow is currently 8.1 percent – or 3,288.2 points – higher than July 31 last year.”



Source: DestiMetrics (8/12/2025)

U.S. Market Review

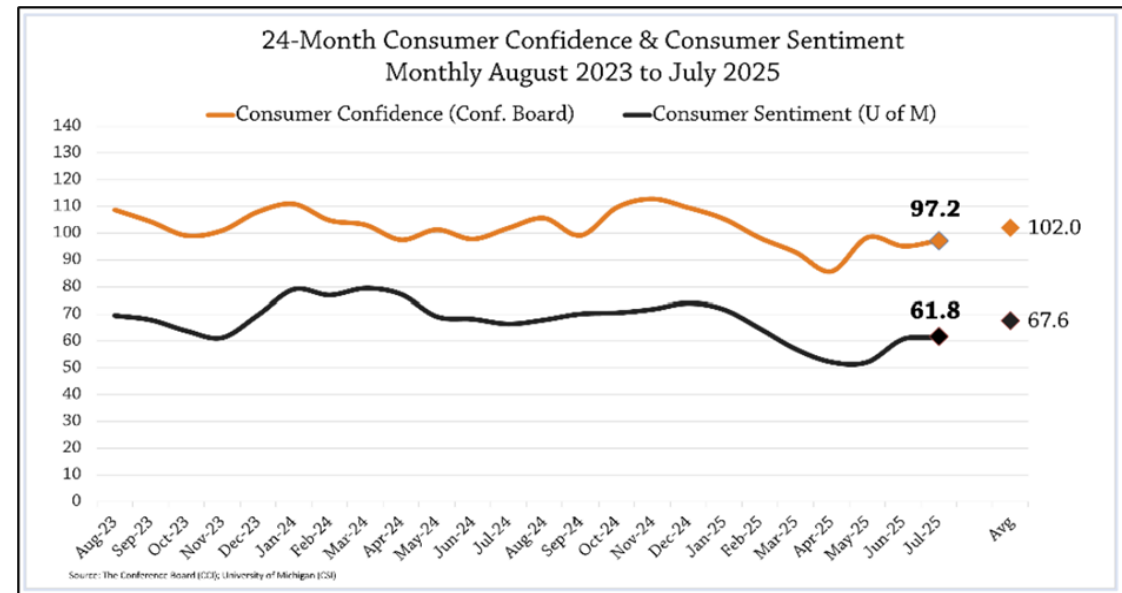


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The Consumer Confidence & Consumer Sentiment Index

- “The CCI and CSI both gained modestly in July, with the CCI continuing to fluctuate between gains and losses while the CSI is on a modest streak. Both remain down sharply from their 12-month highs and 24-month averages.”
- “The Conference Board’s CCI added a modest 2.0 points, or 2.1 percent, and is now at 97.2 points, its highest point since February (98.3 points).”
- “Consumers’ mood was mixed, with a slight improvement in their short-term outlook for income, business, and employment but a modest retreat in their assessment of current conditions.”
- “The CSI from the University of Michigan inched up just a single point in July, but logged its second consecutive gain, and at 61.8 points is also at its highest point since February.”

Source: DestiMetrics (8/12/2025)



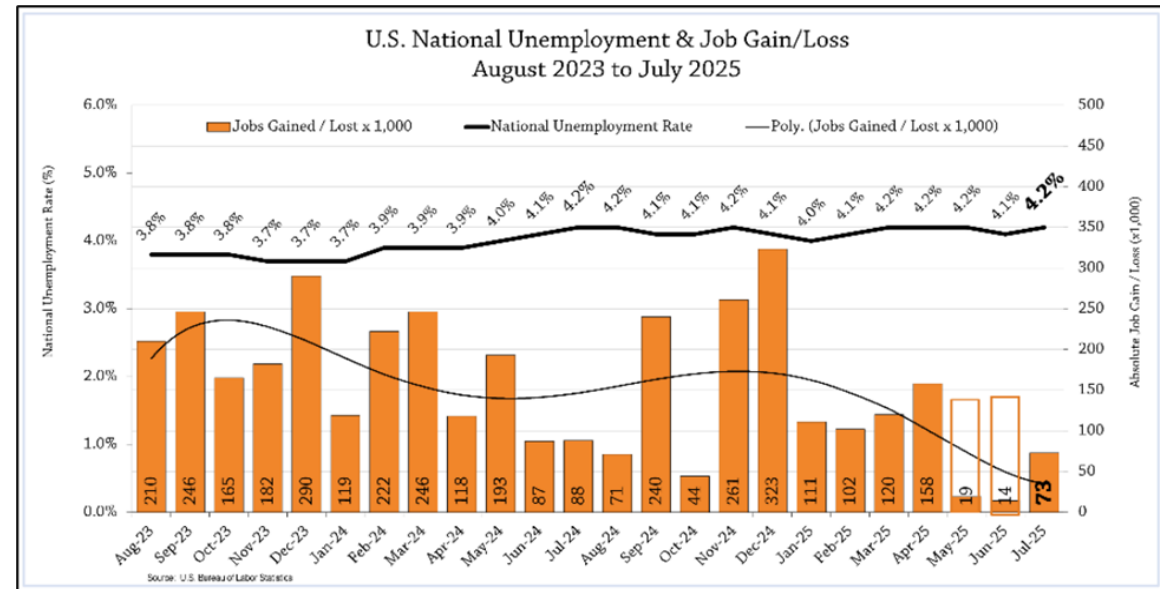
U.S. Market Review



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The National Unemployment Rate

- “Unemployment and Jobs softened considerably in July, and May and June were adjusted sharply downwards, as employers added just 73,000 jobs during the month and the unemployment rate inched up to 4.2 percent.”
- “May was adjusted from 144,000 to just 19,000, and June from 147,000 to 14,000, a total adjustment of 258,000 jobs.”
- “The weaker jobs report is likely an overdue reflection of the impact of trade policy on hiring as employers wait to see what impact both cost and retail price will have on supply and demand and is more closely aligned with the Automatic Data Processing (ADP) jobs data.”
- “The weaker jobs data likely guarantees an interest rate cut from the Federal Reserve Bank in September and perhaps another in December.”



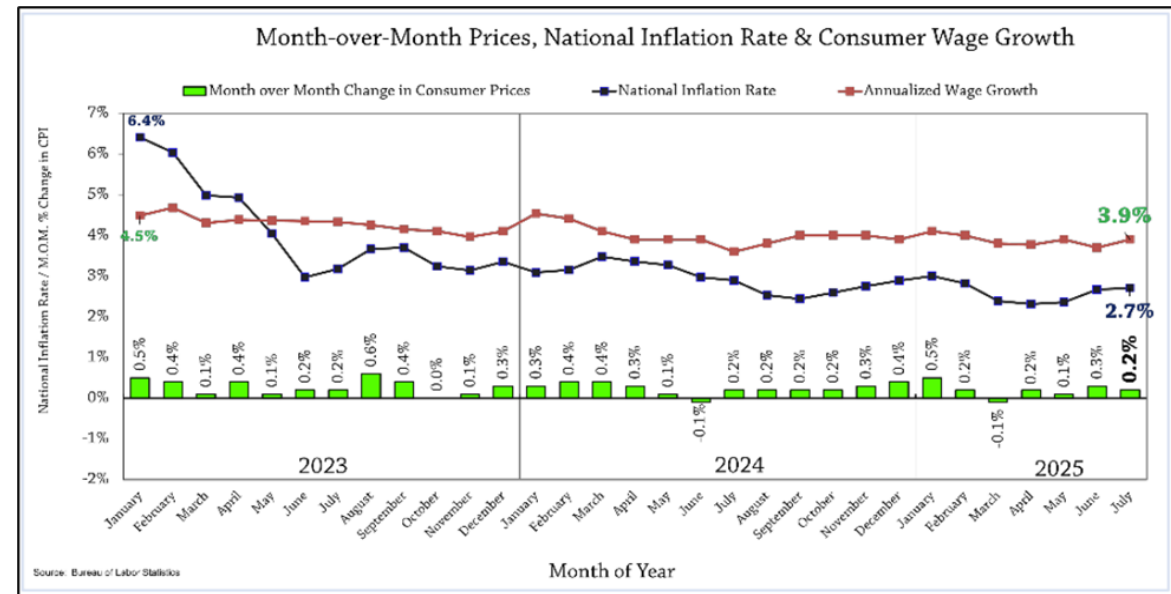
Source: DestiMetrics (8/12/2025)

U.S. Market Review



The National Inflation Rate

- “In a highly anticipated report, the national inflation rate was steady at 2.7 percent, up from 2.3 percent in April and just slightly above the 2.6 percent 12-month average.”
- “However, core inflation, which strips out the volatile energy and food categories, was considerably higher, up 3.1 percent from last year, and up 0.3 percent from last month.”
- “Despite the increase in core inflation, there is some good news in this month’s report, including the increase in annual wage growth compared to inflation, with wages up 3.9 percent compared to the 2.7 percent national inflation rate, and even up versus the 3.1 percent core inflation rate.”
- “The higher rate is not likely enough to deter the Federal Reserve Bank from their plans to cut interest rates in September.”



Source: DestiMetrics (8/12/2025)

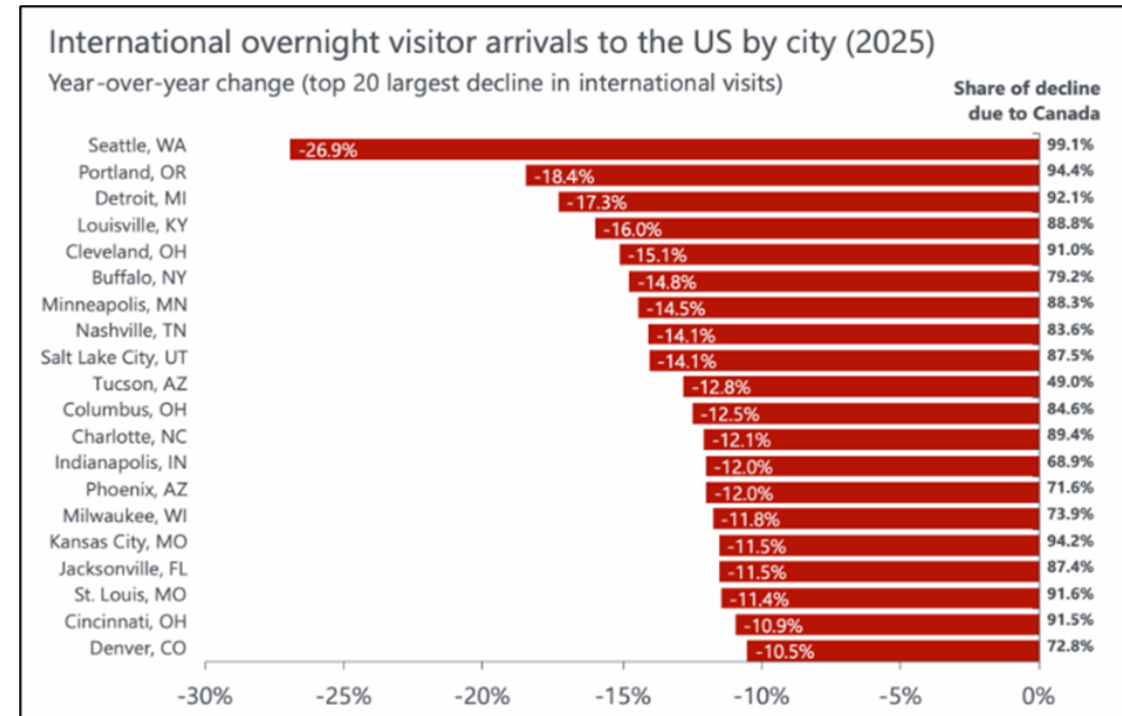
U.S. Market Review



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International Overnight Arrivals

- “Recent data releases through June confirm our forecast of an 8.2% decline in international overnight arrivals to the US for 2025, as sentiment headwinds persist.”
- “The fallout from Canada has been steepest, as land crossings and air arrivals contracted 28.0% and 13.3% year-to-date (YTD), respectively.”
- “The pullback in Canadian travel is expected to most negatively impact cities such as Seattle (-26.9% fall in overnight international visitors expected in 2025), Portland (-18.3%), and Detroit (-17.3%).”
- “Overseas arrivals fell 3.4% in June compared to a year ago, bringing the YTD decline to 1.2%. Among key markets, visitors from Ecuador, South Korea, Germany, and France have fallen the most. Strength in Argentina, Italy, and some Asian countries is partly offsetting the declines.”
- “The contraction in international arrivals is most acute in cities highly dependent on Canadian travel, particularly those closer to the northern border. For 2025, we forecast the steepest year-over-year declines will occur in Seattle, Portland, and Detroit.”



Source: Tourism Economics (7/22/2025)

U.S. Market Review



Visa Integrity Fee

- “On July 4, 2025, H.R.1, the One Big Beautiful Bill Act (“OBBBA”), was signed into law. It outlines a new Visa Integrity Fee that will affect individuals who need to secure a visa at a U.S. embassy or consulate outside the United States.”
- “Beginning on October 1, 2025, a \$250 Visa Integrity Fee will be imposed on foreign nationals applying for non-immigrant visas.”
- “The fee is intended to address visa over-stays. By providing an incentive to receive the fee back after complying with the terms of the visa, the government aims to reduce non-compliance by foreign nationals. It remains unclear how the amount will be credited back to applicants.”
- “The fee does not apply to individuals who are visa-exempt, such as Canadian nationals or nationals of Visa Waiver Program (VWP) countries who are required to apply for Electronic System for Travel Authorization (ESTA).”

Source: KPMG (7/25/2025)

U.S. Market Review



U.S. Hotel Growth Forecast

- “CoStar and Tourism Economics further downgraded growth projections in a revised 2025-26 U.S. hotel forecast.”
- “Given continued underperformance and elevated macroeconomic concerns, forecasted growth rates were lowered across the top-line metrics: demand (-0.6ppts), ADR (-0.5 ppts) and RevPAR (-1.1 ppts).”
- “Similar adjustments were made for 2026: demand (-0.5 ppts), ADR (-0.3 ppts) and RevPAR (-0.7 ppts).”

U.S. Hotel Forecast

YoY – year over year (% change)

	2024 Actual	2025 Forecast	2026 Forecast
Supply (YoY)	+0.5%	+0.8%	+0.8%
Demand (YoY)	+0.5%	-0.1%	+0.6%
Occupancy	63.0%	62.5%	62.3%
ADR (YoY)	+1.8%	+0.8%	+1.0%
RevPAR (YoY)	+1.9%	-0.1%	+0.8%

Source: STR (8/7/2025)

U.S. Market Review



Short Term Rentals Update July 2025

- “Demand growth rebounded in July, rising to 3.6% year-over-year — up from 2.7% in June. While still below the pace seen in summer 2024, the increase was enough to set a new monthly record for the U.S. STR market, with 26.4 million demand nights.”
- “Bookings made in July were up just 0.7% YoY, reflecting a slight slowdown in forward momentum compared to June. Still, that’s an improvement over May, which saw a mild year-over-year decline.”
- “Notably, the timing of Independence Day (falling on a Friday) drove a spike in demand for early July, with many reservations made in June. As a result, fewer July bookings were captured during the month itself, slightly skewing the month-on-month booking growth comparison.”
- “Occupancy has remained slightly lower than in 2024 throughout the summer, largely due to softer demand rather than rapid supply expansion. In July, occupancy fell 1.0% YoY—a continuation of the trend seen since May. However, strong performance earlier in the year (notably January and April) has kept 2025 occupancy ahead of 2024 on a year-to-date basis.”

Source: AirDNA (8/19/2025)

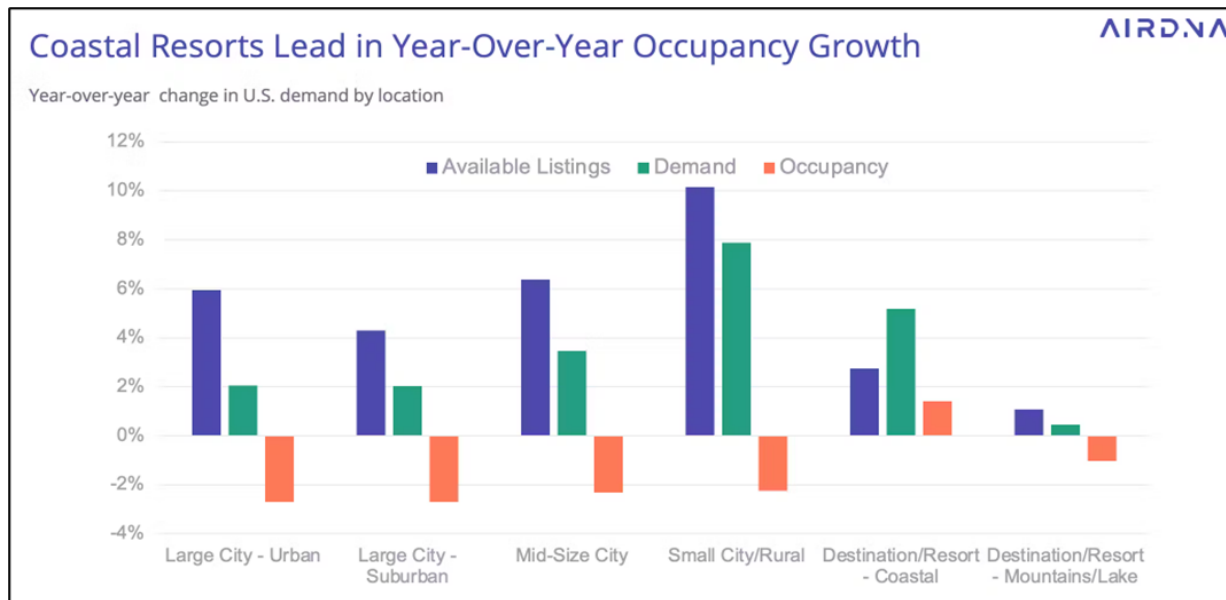
U.S. Market Review



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Short Term Rentals Update July 2025 (continued)

- “Among location types, coastal resorts led occupancy growth with a 1.4% YoY increase—driven by strong demand and relatively flat supply. Mountain resorts saw the second-highest change, but in the opposite direction: demand and supply both declined, resulting in a 1.0% drop in occupancy. Large suburban and urban markets posted the weakest results, each seeing occupancy fall by 2.7% YoY.”



Source: AirDNA (8/19/2025)

U.S. Market Review



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Short Term Rentals Update July 2025 (continued)

- “Average daily rate (ADR) growth remained strong in July, holding at +6.9% year-over-year after three months of acceleration.”
- “A key driver of this trend may be the growing interest in larger homes. Since February, demand for 6+ bedroom properties has grown more than 13 times faster than for single-bedroom listings, and about four times faster than for two-bedroom homes.”
- “While summer occupancy remains slightly below 2024 levels, higher nightly rates have more than compensated, pushing RevPAR up 5.7% YoY across the U.S.”

Key U.S. Short Term Rental Performance Metrics for July 2025

- Available listings reached 1.77 million, a 4.5% increase year-over-year
- Demand nights rose 3.6% compared to July 2024
- Occupancy averaged 67.4%, down 1.1% year-over-year
- Average Daily Rates (ADR) climbed to \$351.67, up 6.9% from last year
- Revenue per Available Rental (RevPAR) increased 5.7% year-over-year (YOY) to \$237.06

Source: AirDNA (8/19/2025)

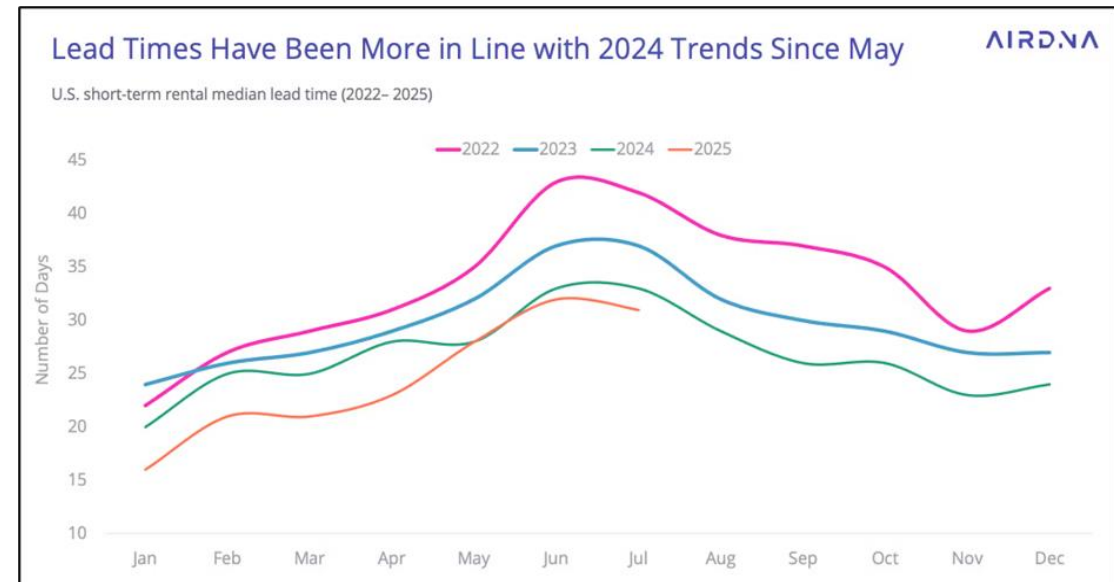
U.S. Market Review



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Short Term Rentals Update July 2025 – Pacing Deep Dive

- “Over the past year, shorter lead times have made pacing data less reliable as a predictor of future demand. Bookings have increasingly skewed toward very short notice, or, in the case of some luxury properties, unusually long lead times, making it harder to interpret pacing trends.”
- “However, recent months suggest a modest return to stability. In May, the median lead time matched the previous year at 28 days, narrowing what had been a 4–5 day gap earlier in the year. Lead times in June and July remained slightly shorter year-over-year (but by only one and two days, respectively), indicating a more consistent booking pattern than earlier in 2025.”



Source: AirDNA (8/19/2025)

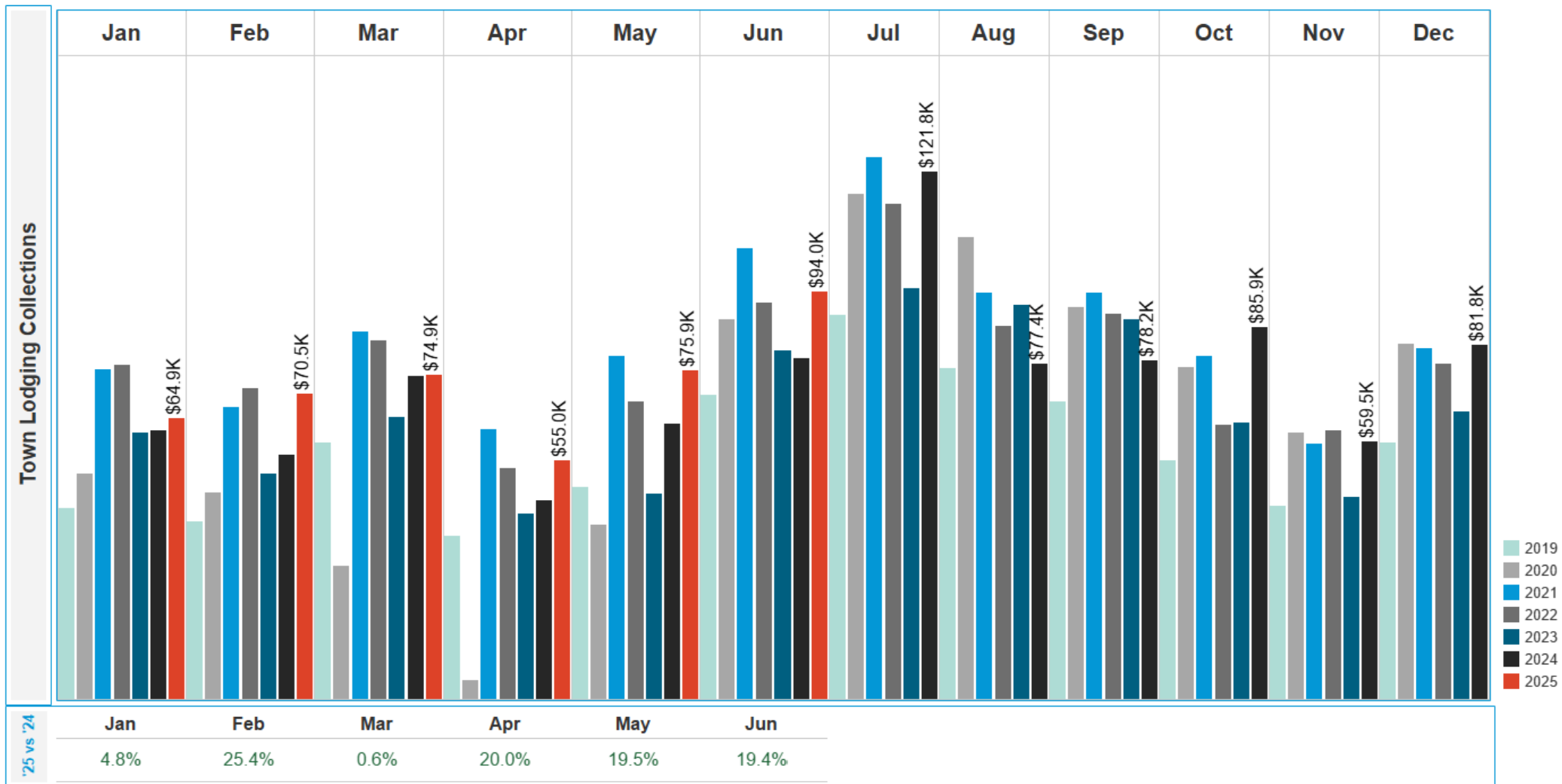


Lodging Tax Collections

Pagosa Springs Monthly Lodging Tax Collections Town Collections Through June 2025



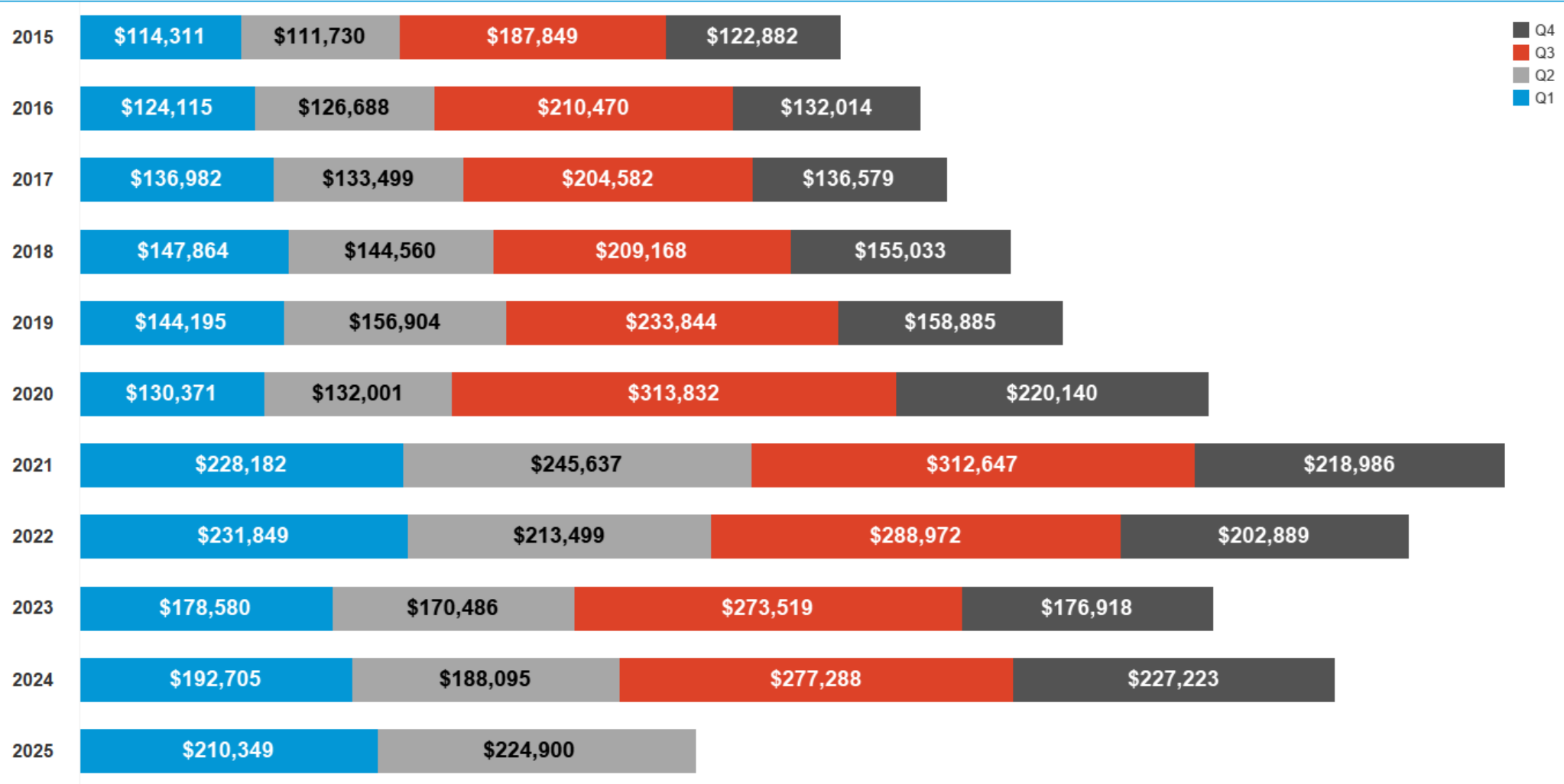
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Pagosa Springs Monthly Lodging Tax Collections Town Collections Through June 2025



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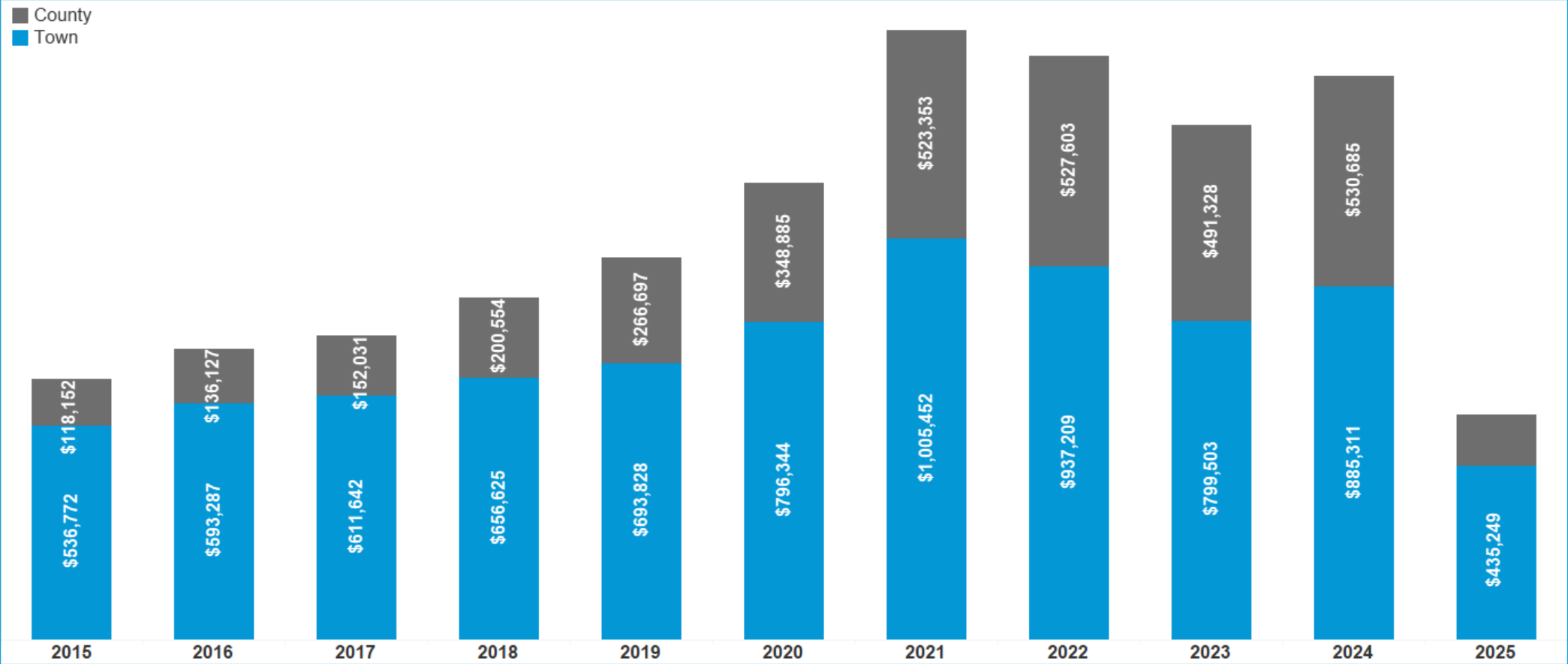
Pagosa Springs Monthly Lodging Tax Collections Total Collections Through June 2025

Note: County collections are reported quarterly.



2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025
\$654,924	\$729,414	\$763,673	\$857,179	\$960,525	\$1,145,229	\$1,528,805	\$1,464,812	\$1,290,831	\$1,415,996	\$565,671

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Pagosa Springs Quarterly Lodging Tax Collections

Total Collections Through June 2025

Note: County collections are reported quarterly.



		2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025
Q1	County	\$25,952	\$18,416	\$35,792	\$29,030	\$46,261	\$57,791	\$128,910	\$127,543	\$125,829	\$116,111	\$130,422
	Town	\$114,311	\$124,115	\$136,982	\$147,864	\$144,195	\$130,371	\$228,182	\$231,849	\$178,580	\$192,705	\$210,349
	Total	\$140,263	\$142,531	\$172,774	\$176,894	\$190,456	\$188,162	\$357,092	\$359,392	\$304,409	\$308,816	\$340,771
Q2	County	\$16,326	\$33,172	\$29,896	\$56,080	\$45,483	\$52,809	\$115,041	\$129,385	\$90,666	\$106,066	
	Town	\$111,730	\$126,688	\$133,499	\$144,560	\$156,904	\$132,001	\$245,637	\$213,499	\$170,486	\$188,095	\$224,900
	Total	\$128,056	\$159,860	\$163,395	\$200,640	\$202,387	\$184,810	\$360,678	\$342,884	\$261,152	\$294,161	\$224,900
Q3	County	\$47,765	\$47,929	\$49,470	\$65,609	\$93,349	\$136,452	\$166,440	\$158,901	\$155,889	\$158,877	
	Town	\$187,849	\$210,470	\$204,582	\$209,168	\$233,844	\$313,832	\$312,647	\$288,972	\$273,519	\$277,288	
	Total	\$235,614	\$258,399	\$254,052	\$274,777	\$327,193	\$450,284	\$479,087	\$447,873	\$429,408	\$436,165	
Q4	County	\$28,109	\$36,610	\$36,873	\$49,835	\$81,604	\$101,833	\$112,962	\$111,774	\$118,944	\$149,631	
	Town	\$122,882	\$132,014	\$136,579	\$155,033	\$158,885	\$220,140	\$218,986	\$202,889	\$176,918	\$227,223	
	Total	\$150,991	\$168,624	\$173,452	\$204,868	\$240,489	\$321,973	\$331,948	\$314,663	\$295,862	\$376,854	
Grand Total		\$654,924	\$729,414	\$763,673	\$857,179	\$960,525	\$1,145,229	\$1,528,805	\$1,464,812	\$1,290,831	\$1,415,996	\$565,671

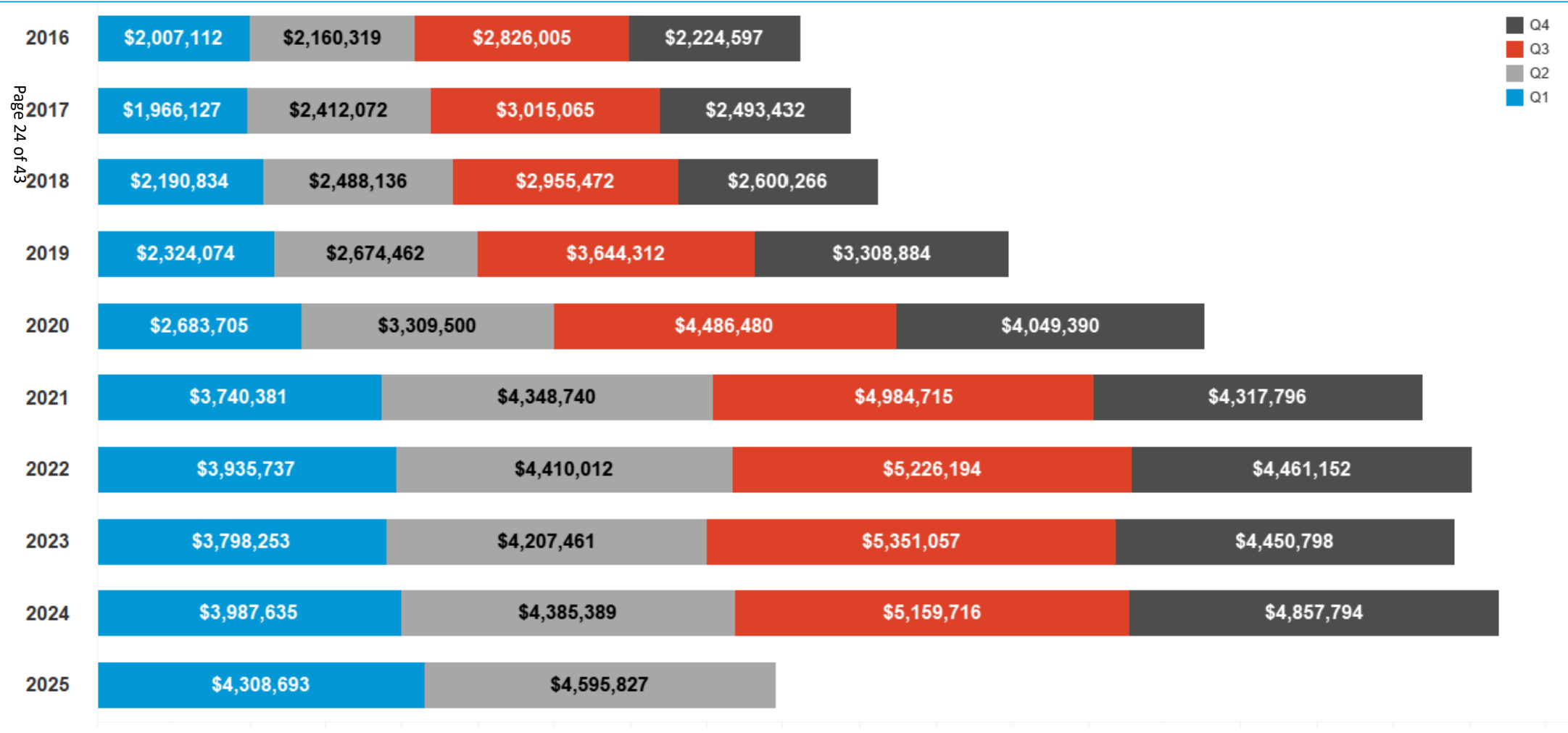
Sales Tax Collections

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Other Department Reports VII.2.

Pagosa Springs Quarterly Sales Tax Collections
Collections Through June 2025



Pagosa Springs Quarterly Sales Tax Collections Collections Through June 2025

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	Jan	Feb	Mar	Q1 Total	Apr	May	Jun	Q2 Total	Jul	Aug	Sep	Q3 Total	Oct	Nov	Dec	Q4 Total
2016	\$630,442	\$600,885	\$775,785	\$2,007,112	\$582,924	\$639,544	\$937,851	\$2,160,319	\$970,231	\$991,688	\$864,087	\$2,826,005	\$698,521	\$667,832	\$858,244	\$2,224,597
2017	\$602,618	\$614,496	\$749,013	\$1,966,127	\$654,961	\$766,390	\$990,721	\$2,412,072	\$1,050,936	\$1,034,538	\$929,591	\$3,015,065	\$802,192	\$735,197	\$956,044	\$2,493,432
2018	\$720,250	\$653,308	\$817,277	\$2,190,834	\$685,584	\$778,029	\$1,024,523	\$2,488,136	\$1,055,648	\$975,397	\$924,427	\$2,955,472	\$894,585	\$760,714	\$944,967	\$2,600,266
2019	\$748,135	\$705,628	\$870,311	\$2,324,074	\$722,725	\$847,452	\$1,104,285	\$2,674,462	\$1,330,750	\$1,156,262	\$1,157,300	\$3,644,312	\$1,160,328	\$966,585	\$1,181,971	\$3,308,884
2020	\$893,260	\$861,387	\$929,059	\$2,683,705	\$881,784	\$1,029,961	\$1,397,755	\$3,309,500	\$1,478,390	\$1,414,702	\$1,593,388	\$4,486,480	\$1,351,716	\$1,210,111	\$1,487,563	\$4,049,390
2021	\$1,230,886	\$1,118,790	\$1,390,705	\$3,740,381	\$1,243,257	\$1,382,546	\$1,722,937	\$4,348,740	\$1,744,911	\$1,544,973	\$1,694,832	\$4,984,715	\$1,389,189	\$1,328,089	\$1,600,518	\$4,317,796
2022	\$1,285,659	\$1,224,286	\$1,425,792	\$3,935,737	\$1,265,285	\$1,428,491	\$1,716,237	\$4,410,012	\$1,831,470	\$1,793,418	\$1,601,307	\$5,226,194	\$1,425,011	\$1,430,027	\$1,606,114	\$4,461,152
2023	\$1,271,275	\$1,186,669	\$1,340,310	\$3,798,253	\$1,155,340	\$1,376,511	\$1,675,610	\$4,207,461	\$1,846,753	\$1,867,837	\$1,636,468	\$5,351,057	\$1,518,791	\$1,391,273	\$1,540,735	\$4,450,798
2024	\$1,338,250	\$1,230,171	\$1,419,214	\$3,987,635	\$1,261,412	\$1,433,936	\$1,690,041	\$4,385,389	\$1,855,193	\$1,655,248	\$1,649,275	\$5,159,716	\$1,718,686	\$1,434,372	\$1,704,736	\$4,857,794
2025	\$1,405,815	\$1,364,117	\$1,538,761	\$4,308,693	\$1,370,948	\$1,469,254	\$1,755,625	\$4,595,827								
YOY Change					YOY Change				YOY Change				YOY Change			
2022	4%	9%	3%	5%	2%	3%	0%	1%	5%	16%	-6%	5%	3%	8%	0%	3%
2023	-1%	-3%	-6%	-3%	-9%	-4%	-2%	-5%	1%	4%	2%	2%	7%	-3%	-4%	0%
2024	5%	4%	6%	5%	9%	4%	1%	4%	0%	-11%	1%	-4%	13%	3%	11%	9%
2025	5%	11%	8%	8%	9%	2%	4%	5%								



Short-Term Rental Performance (Airbnb & Vrbo)

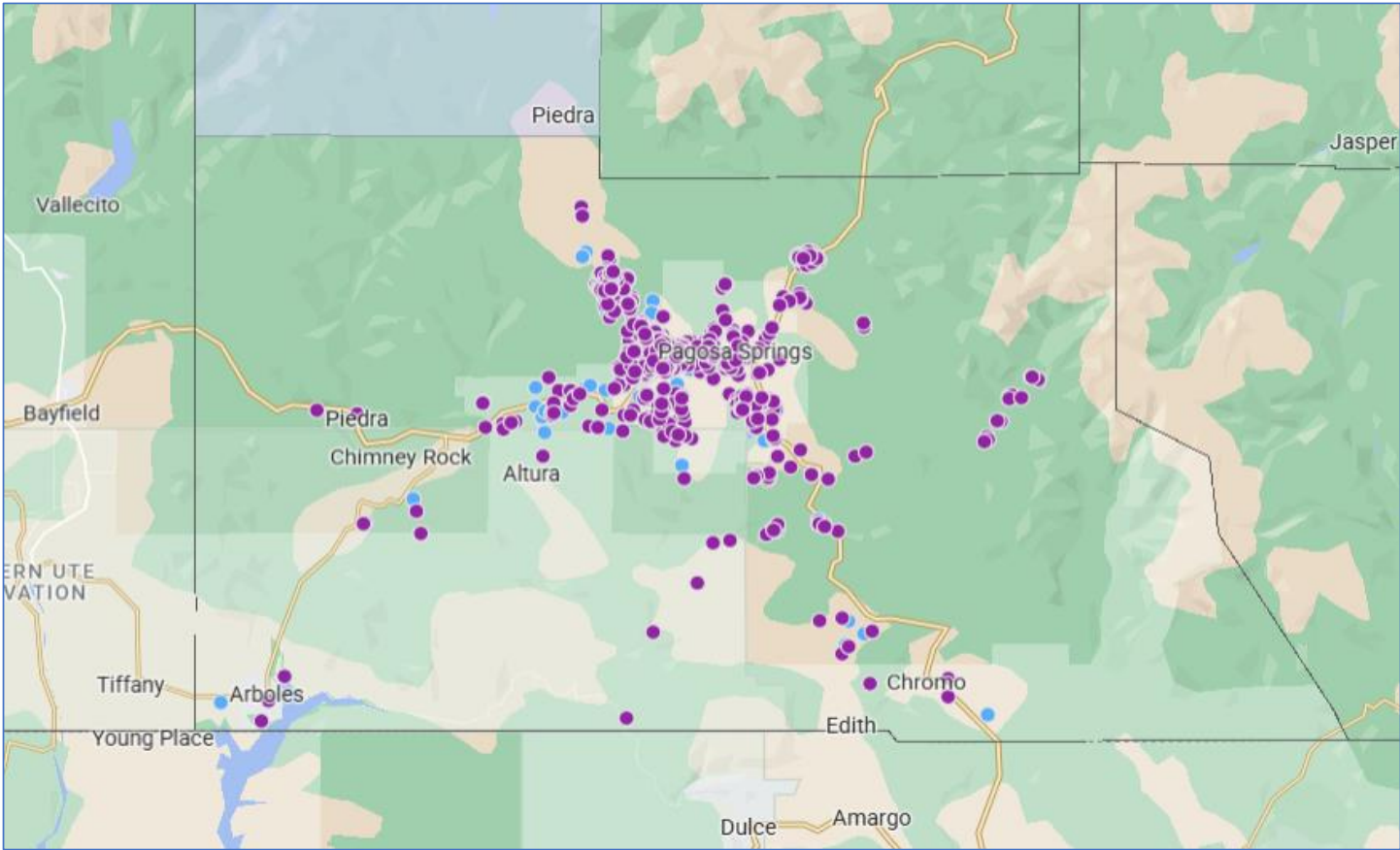
AirDNA - Definitions



- **Active Listings** – Total number of listings whose calendars had at least one day classified as available or reserved during the reporting period.
- **Average Daily Rate** – Average daily rate (ADR) of booked nights in USD ($\text{ADR} = \text{Total Revenue} / \text{Booked Nights}$).
- **Demand (Listing Days Booked)** – Total number of days booked during the reporting period.
- **Supply (Listing Days Available)** – Total number of days available during the reporting period.
- **Occupancy Rate** – $\text{Occupancy Rate} = \text{Total Booked Days} / (\text{Total Booked Days} + \text{Total Available Days})$. The calculation only includes vacation rentals with at least one Booked Night.
- **Revenue (USD)** – Total revenue (in US dollars) earned during the reporting period. Includes the advertised price from the time of booking, as well as cleaning fees.
- **RevPAR** – $\text{Revenue Per Available Rental} = \text{ADR} * \text{Occupancy Rate}$

Source: AirDNA

AirDNA Geographical Boundary



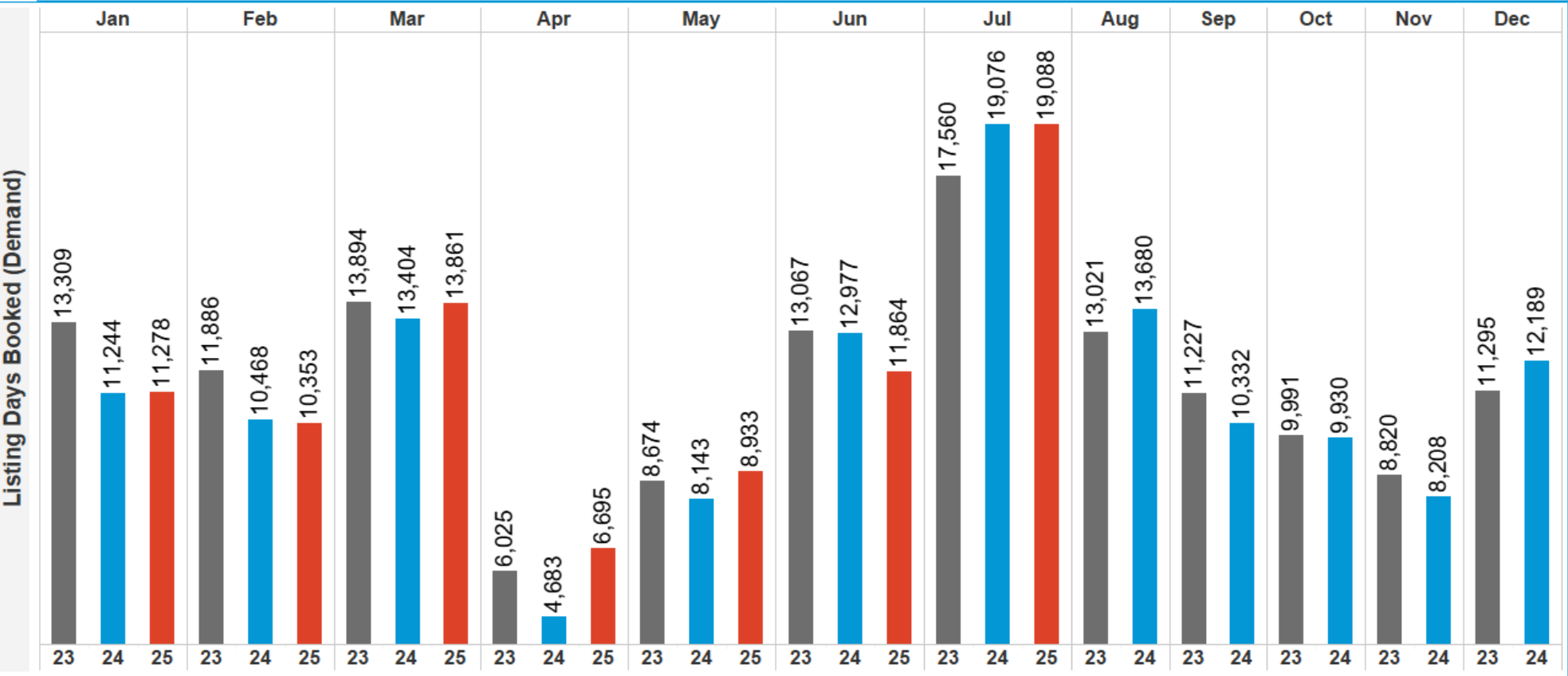
Source: AirDNA

Pagosa Springs Monthly Short-Term Rental Performance
July 2025

Source: AirDNA, 'Entire Place' Listings Only



YOY	Jul '25					
	Occupancy	ADR	RevPAR	Active Listings	Listing Days Booked	Revenue
	75.8%	\$296.64	\$224.89	1,004	19,088	\$5,662,264
	1.8%	4.2%	6.1%	-3.5%	0.1%	4.3%



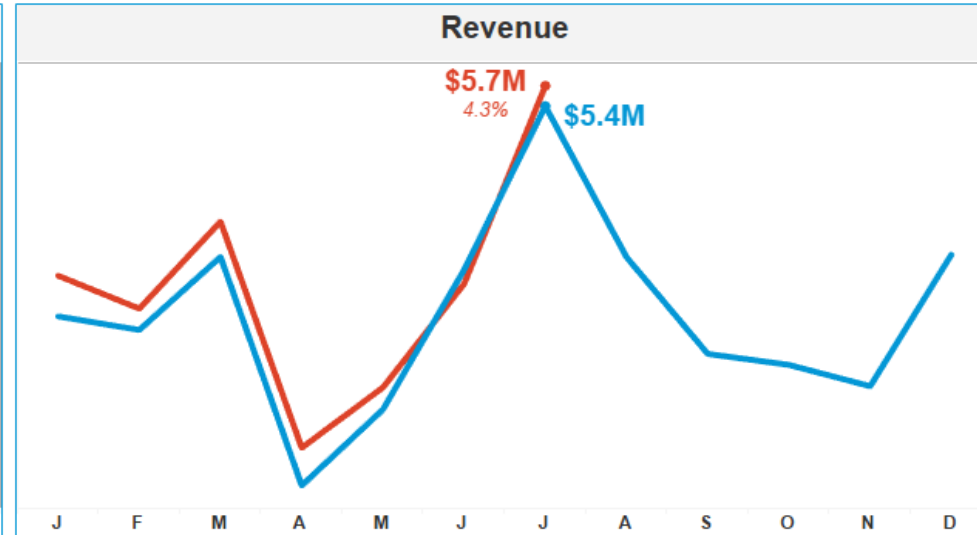
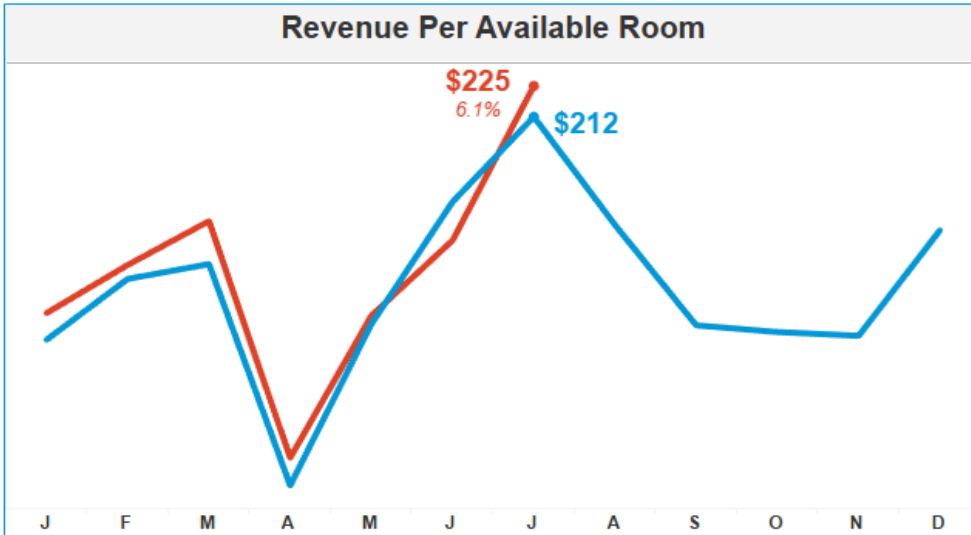
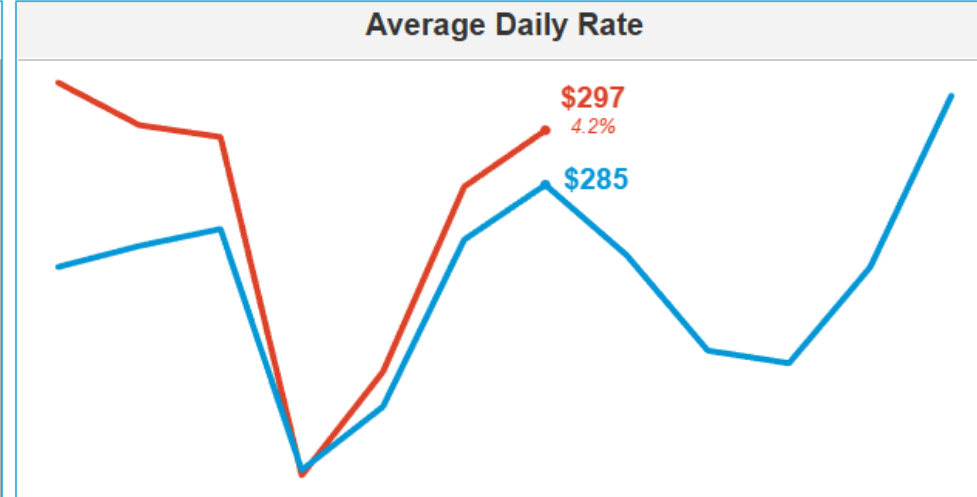
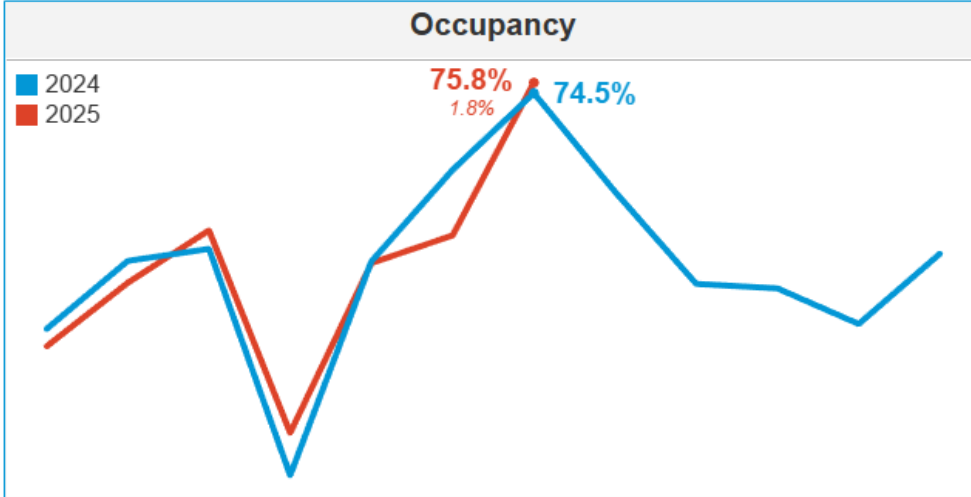
Pagosa Springs Monthly Short-Term Rental Performance

July 2025

Source: AirDNA, 'Entire Place' Listings Only



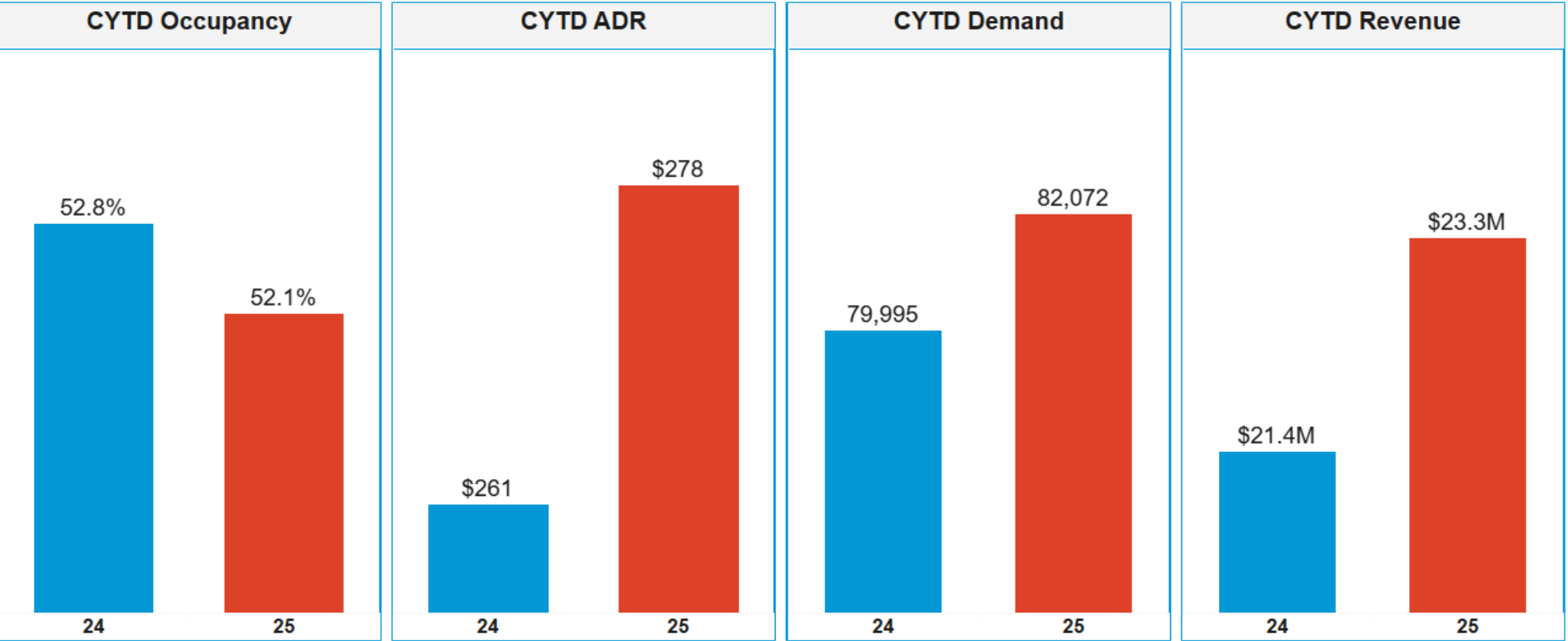
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Pagosa Springs Monthly Short-Term Rental Performance
Calendar YTD Through July 2025

Source: AirDNA, 'Entire Place' Listings Only

YTD '25 YOY	Occupancy	ADR	RevPAR	Avg. Active Listings	Listing Days Booked	Revenue
	52.1%	\$277.72	\$146.77	934	82,072	\$23,316,732
	-1.2%	6.5%	4.8%	3.4%	2.6%	8.8%



Social Media Performance

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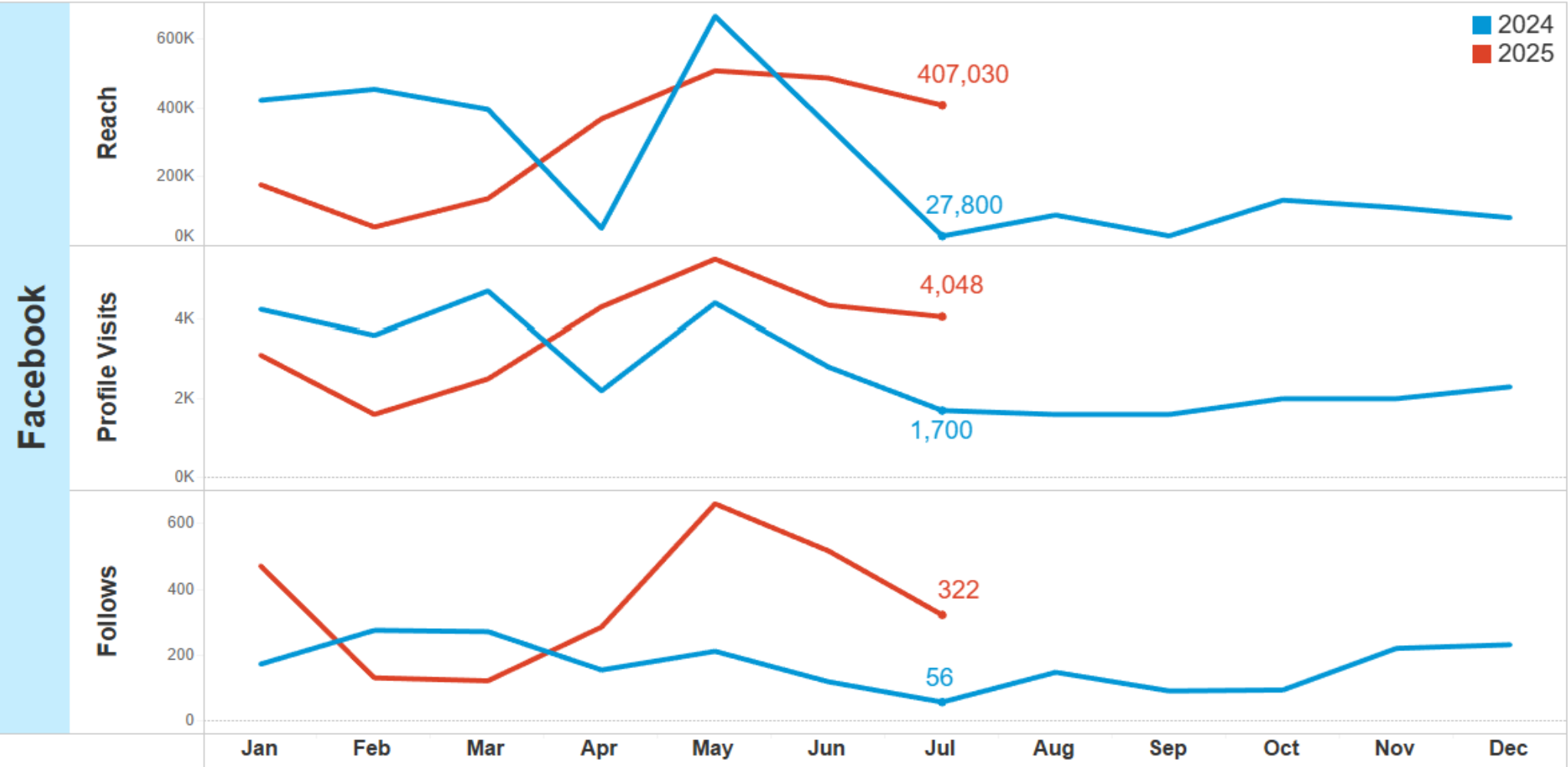


Other Department Reports VII.2.

Pagosa Springs Monthly Social Media Performance
Through July 2025

Source: Meta

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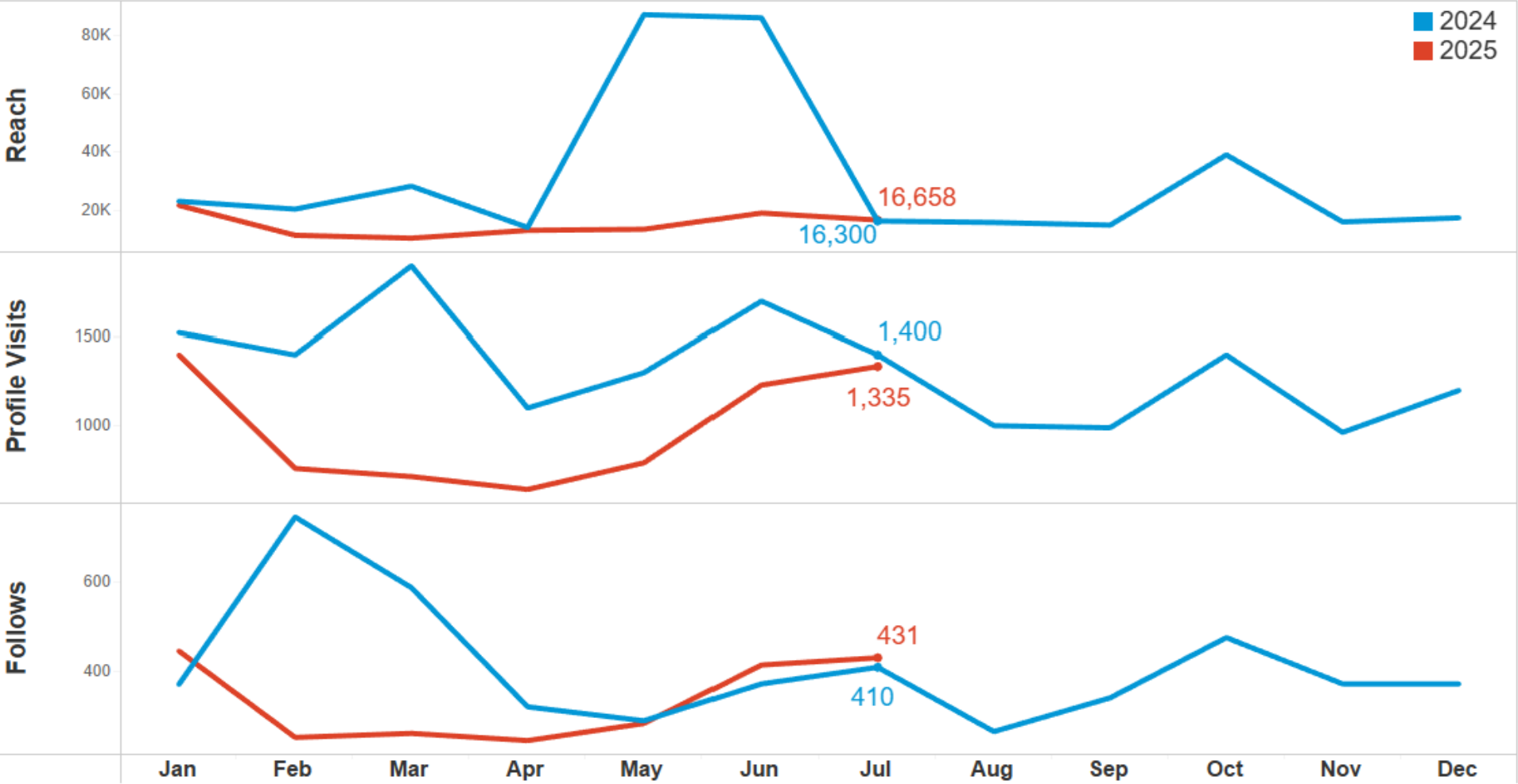


Pagosa Springs Monthly Social Media Performance Through July 2025

Source: Meta

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Instagram

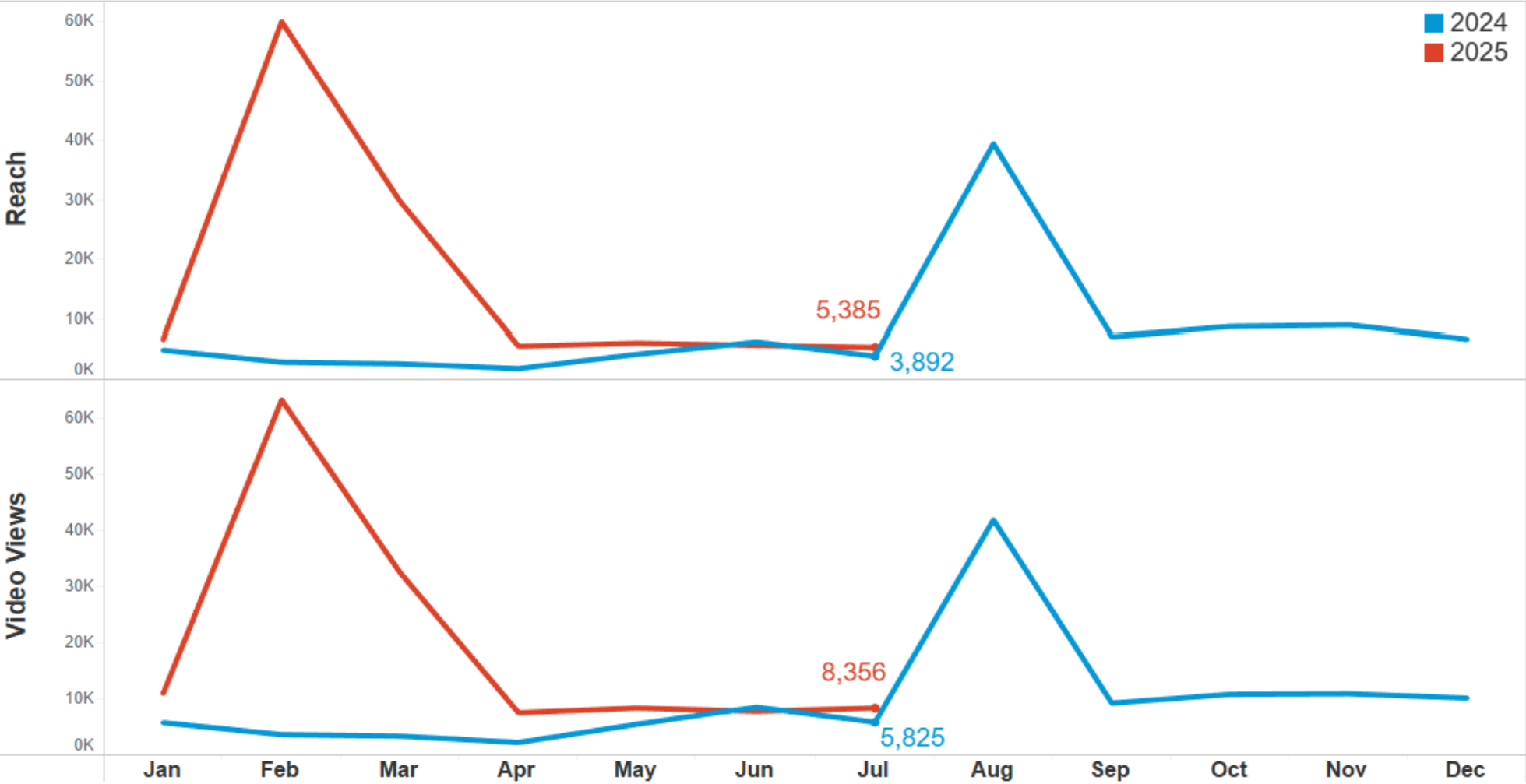


Pagosa Springs Monthly Social Media Performance Through July 2025

Source: Tiktok

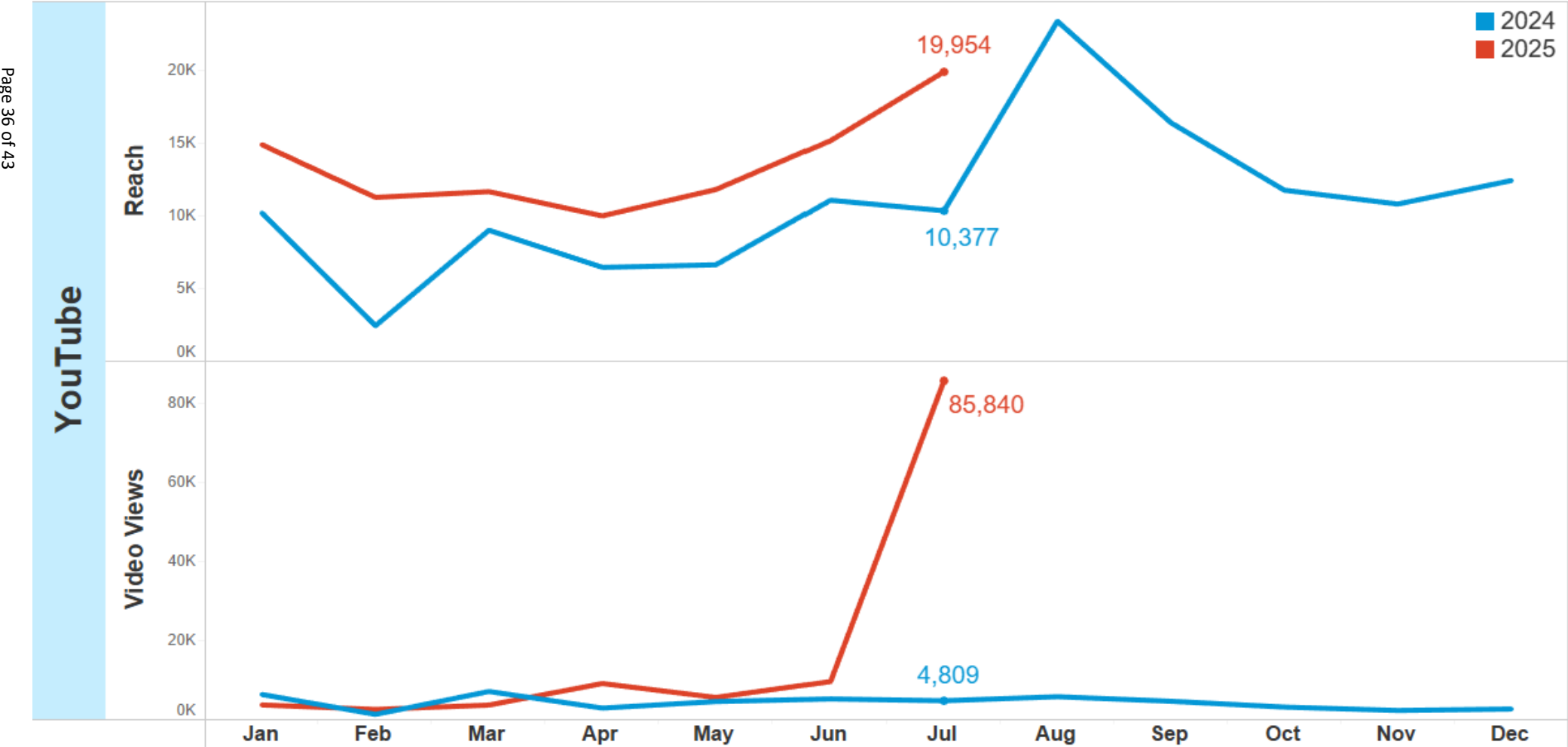
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TikTok



Pagosa Springs Monthly Social Media Performance
Through July 2025

Source: YouTube





Consumer Sentiment

American Travel Sentiment Study Wave 98



*Survey fielded July 1, 2025; US National Sample of 1,000 adults 18+

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American Travel Sentiment Wave 98 Highlights

Key Findings:

- 1. Concerns About Gas Prices Return to Previous Levels**
Concerns about gas prices were at a low in June 2025 with 17% of travelers indicating it was greatly impacting their travel decisions. It has since returned to previous levels with a six-point increase in July 2025 (23%). Despite fuel prices remaining lower than last summer, this is likely due to the overall impact of inflation and personal financial concerns.
- 2. Half of Travelers Have Spent At Least One Night Following a Touring Route**
Half (56%) of travelers have spent at least one night following a touring route or scenic/historic highway in the last five years. A quarter (25%) of travelers followed a touring route once and three in ten (31%) have done so multiple times.
- 3. Majority of Travelers Used Their Personal Vehicle on a Touring Route**
Seven in ten (68%) travelers who have spent time following a touring route used their own car/truck on the route. About one third (35%) used a rental car.
- 4. Dining, Outdoor Scenery, and Historical Sites/Attractions are Top Interests on Touring Routes**
The top three interests while on touring routes are great local restaurants, cafes and dining (40%); wonderful outdoor scenery (40%); and historical sites/attractions (36%).
- 5. A Third of Travelers are Extremely Interested in Touring Route 66**
With Route 66's 100th year anniversary coming up, a third (33%) of travelers are extremely interested in touring all or part of Route 66 at some point.

Source: Longwoods International ATS Wave 98



Longwoods | miles
INTERNATIONAL PARTNERSHIP

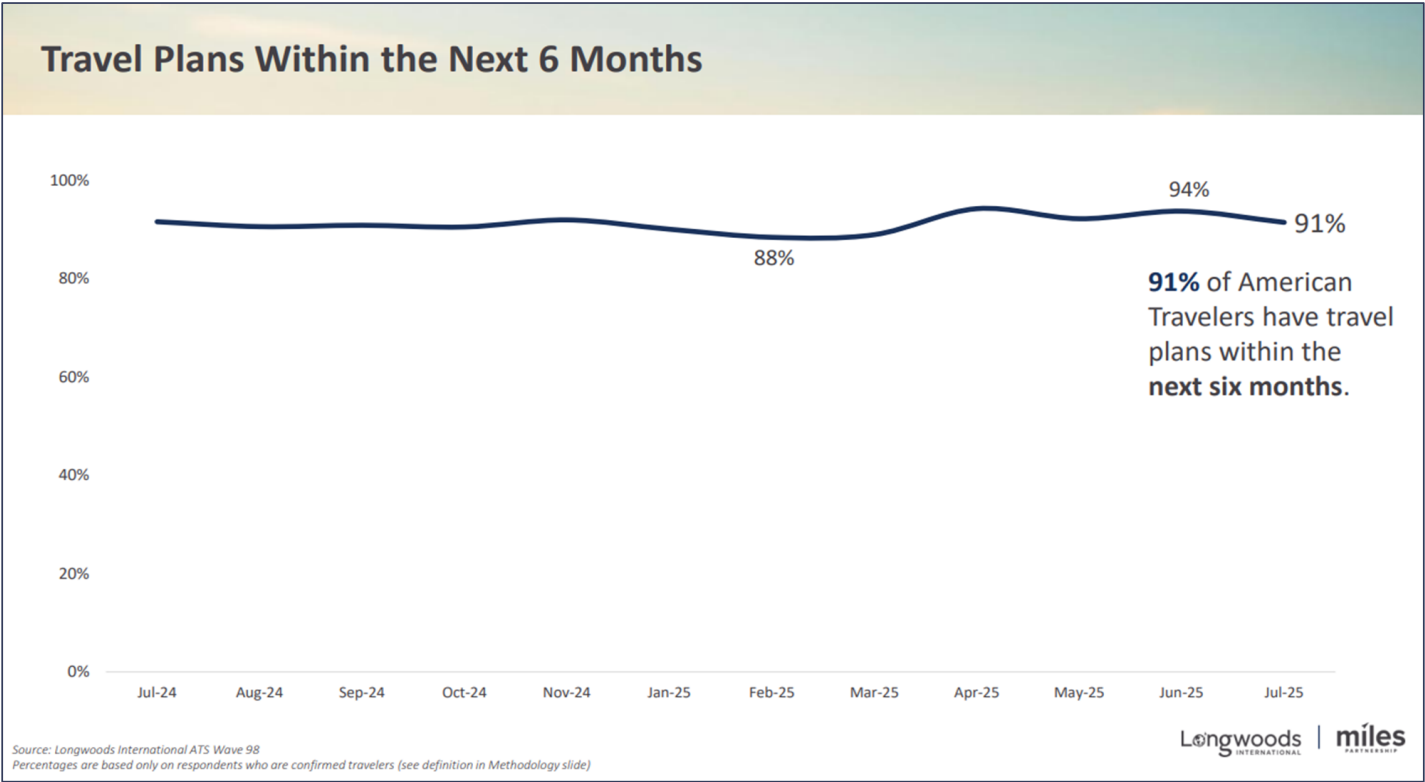
Source: Longwoods International

American Travel Sentiment Study Wave 98



*Survey fielded July 1, 2025; US National Sample of 1,000 adults 18+

*Page 39 of 43



Source: Longwoods International

American Travel Sentiment Study Wave 98



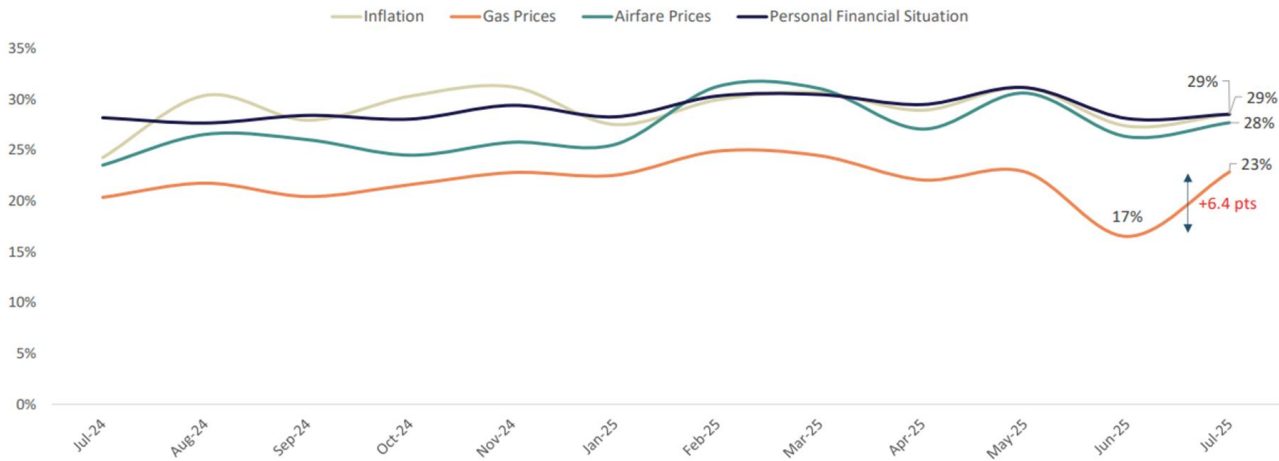
*Survey fielded July 1, 2025; US National Sample of 1,000 adults 18+

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Increase in Concern About Gas Prices Greatly Impacting Travel Plans

Concerns Impacting Your Travel Decisions in the Next Six Months

The chart shows the percentage of respondents who rated each factor as "Greatly impact" their travel plans (a 5 on a 1-5 scale) over the period from June 2024 to June 2025.



Source: Longwoods International ATS Wave 98
Percentages are based only on respondents who are confirmed travelers and intend on traveling in the next six months



Source: Longwoods International

American Travel Sentiment Study Wave 98



*Survey fielded July 1, 2025; US National Sample of 1,000 adults 18+

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American Travel Sentiment Methodology

The American Travel Sentiment Study is the most comprehensive and longest-running survey of its kind, offering valuable insights into the factors influencing American travel behaviors.

Key Details:

- Survey Date: July 1, 2025
- Sample Size: 1,000 U.S. adults (18+)
- Margin of Error: $\pm 3\%$
- Representative of U.S. population demographics (age, gender, region)

Travelers are only respondents that have taken a trip in the last 3 years and intend to take a trip in the next 2 years.

Conducted with support from Miles Partnership, this study remains a vital tool for understanding the dynamic landscape of American travel.



Longwoods | miles
INTERNATIONAL PARTNERSHIP

Source: Longwoods International

THANK YOU

PAGOSA
SPRINGS
COLORADO

THE PAGOSA RESORT





AGENDA BRIEF

MEETING: Town Council - 16 Sep 2025

FROM: Candace Dzielak, Court Administrator

PROJECT: Municipal Court Department Report

ACTION: Council Update

PURPOSE/BACKGROUND:

IN-COURT ACTIVITY UPDATE AND SUPERVISION CASELOAD UPDATE

COURT SESSIONS ~ Four (4) court sessions were conducted in August 2025.

- Please see the attachment for Case Characteristics and Supervision Caseload.

COURT FILINGS -- YEAR TO DATE

	<u>2025 [through August]</u>	<u>2024 [through August]</u>	<u>2023 [through August]</u>
Traffic	268	272	239
Parking	186	153	151
Criminal Adult	56	67	47
Criminal Juvenile	8	21	44
Civil	0	0	0

2026 BUDGET

- Court staff is assessing organizational and departmental needs to generate the budget proposal for Fiscal Year 2026 (FY26). The Court will request capital funding to acquire the technological means to provide concurrent live streaming of and virtual participation in Court proceedings as required by Colorado law. The Court will submit personnel requests to facilitate the increasing emphasis on community-based and problem-solving sentencing strategies.
- **UPDATE AUGUST 1, 2025.** Conference Technologies, Inc. (CTI) installed and maintains the audio/visual equipment in the Council Chambers. CTI's cost proposal to improve the recording and broadcasting capabilities in the Council Chambers has increased from the proposal submitted in the budget request for FY2025. If approved for FY2026, the capital project will require a formal bidding process. The software costs, to allow concurrent live streaming and virtual participation in Court proceedings, have not increased for FY2026. Court staff will pursue grant funding, if available, for the project.

ATTACHMENTS:

[Supervision Caseload and Case Characteristics for August 2025, Report to Council September 2025](#)



Pagosa Springs Municipal Court
Report to Council
September 16, 2025

Pagosa Springs Municipal Court Activity August 2025	
Cases Docketed	35
Criminal	23
Adults	14
Juveniles	9
Traffic	12
Adults	12
Juveniles	0
Civil	0
Adults	0
Juveniles	0

Pagosa Springs Municipal Court Supervision Caseload September 8, 2025		
Cases Under Supervision	Total	Percentage of Caseload
Criminal	23	52.273%
Adults	19	
Juveniles	4	
Males	14	
Females	9	
Diversion	5	11.363%
Adults	0	
Juveniles	5	
Males	3	
Females	2	
Traffic	16	36.364%
Adults	16	
Juveniles	0	
Males	8	
Females	8	
Civil	0	0.00%
Adults	0	
Juveniles	0	
Males	0	
Females	0	

Pagosa Springs Municipal Court Debt Recovery Report August 31, 2025						
Year Referred	CRIMINAL			TRAFFIC		
	Cases Referred	Amount Referred	Amount Recovered	Cases Referred	Amount Referred	Amount Recovered
2018	0	\$0.00	\$0.00	0	\$0.00	\$0.00
2019	11	\$3,155.45	\$35.00	2	\$8,643.14	\$0.00
2020	16	\$3,438.72	\$0.00	3	\$1,680.00	\$0.00
2021	10	\$3,065.00	\$328.00	4	\$12,429.25	\$0.00
2022	16	\$2,425.00	\$0.00	34	\$8,721.50	\$156.00
2023	11	\$3,640.63	\$135.00	20	\$5,627.00	\$823.00
2024	10	\$1,435.00	\$0.00	27	\$5,065.00	\$335.00
2025	16	\$2,696.99	\$0.00	8	\$1,669.00	\$197.00
TOTALS	90	\$19,856.79	\$498.00	98	\$43,834.89	\$1,511.00
Criminal Restitution Owed \$5,343.79				Traffic Restitution Owed \$23,948.89		
Amounts Unrecoverable \$0.00				Amounts Unrecoverable \$450.00		



AGENDA BRIEF

MEETING: Town Council - 16 Sep 2025

FROM: Darren Lewis, Parks & Recreation Director

PROJECT: Parks and Recreation Department Monthly Report

ACTION: Information

PURPOSE/BACKGROUND:

Recreation Department Report:

In August, our free community program classes saw a total of 354 participants enjoying offerings such as yoga, dance, drop-in volleyball, emotional freedom technique training, somatic psychotherapy focusing class, wire wrapping rings, zentangle, and pickleball lessons. The gym floor had its annual refinish last month, and the gym is now fully open for use.

Our youth soccer programs have successfully kicked off, with over 115 participants across the 9-12-year-old and 5-6-year-old sessions. Registration is currently open for all our fall/winter youth sports, including 7-9 year-old basketball, 10-12 year-old girls basketball, and 7-12 year-old youth/family conditioning for the remainder of the year.

Reservoir Hill: We submitted our Proposal to the Forest Legacy for Reservoir Hill acquisition on 9/12/25. We will see how our project is ranked nationally in the Spring of 2026.

Public Arts Update:

Artist Phillip Seth has arrived and will be working on painting the geothermal building until September 27th. We are planning a dedication ceremony and ribbon-cutting for his work on the morning of September 27th, time TBD. He will host a live painting demonstration on Sunday, September 21st, at 1:00 pm for anyone interested in seeing his work live. The Public Arts Committee is actively researching locations and art types for future calls in 2026.

Park Update

The Parks Department staff have been actively engaged in routine maintenance across all Parks and Town-owned areas. Engineered wood fiber mulch was recently installed at Town Park.

Staff recently coordinated with Chris Pitcher to establish an inlet holding area in the river for the Yamaguchi Pump. This ensures an adequate water supply for irrigation at Yamaguchi Park and the high school. The pump and filter array are now functioning optimally, with the river providing sufficient water to maintain peak discharge.

Additionally, Parks staff have had a very successful year with flower propagation in the various planters around Town. Staff are now preparing to harvest seeds and cuttings for next season's flowers.

Projects

The asphalt trails at the River Center and Town Park will be resealed in the next 45 days.



AGENDA BRIEF

MEETING: Town Council - 16 Sep 2025

FROM: Bill Rockensock, Police Chief

PROJECT: Police Department Report

ACTION: Update and Discussion

PURPOSE/BACKGROUND:

POLICE DEPARTMENT INCIDENT REPORTING

The Pagosa Springs Police Department Statistics for August 2025.

Officers responded to 621 calls for service.

Officers completed 68 incident offense reports.

Officers completed 12 accident investigation reports.

<https://docs.google.com/spreadsheets/d/1QLJrctjrdtCoQAuZw8rEtuQlld8xjrKB/edit?usp=sharing&ouid=110596842914264149875&rtpof=true&sd=true>

OFFICER TRAINING UPDATE

Training for August 2025.

Daily training bulletins are administered to each officer by Lexipol to keep current on police department policy.

All Officers completed in service emergency vehicle operation training.

Detective Leewitt complete Sexual Assault response and investigation training.

Detective Leewitt completed PPCT defensive instructor certification.

Officer Civileto completed Intoxilyzer training.

RECRUITING UPDATE

The police department has 1 patrol position open.

(2 Police Cadets have been hired to attend the police academy Cadet Halverson and Cadet Hill)

COMMUNITY EVENTS UPDATE

The police department has increased foot patrol in the downtown area and the community policing effort.

The police department is participating in the statewide DUI Enforcement Campaign.

The police department is participating in the statewide Click it or Ticket Campaign.

The police department sponsored National Night Out August 5th.

The police department sponsored family Movie Night August 8th.

You can follow the police department's updated events and local information on Facebook.

CAPITAL IMPROVEMENTS UPDATE

The police department has was awarded a Colorado POST in-service training grant for \$4,280 for the 2025/2026 fiscal year.

The police department received a \$2000 Walmart community grant for National Night Out.

The police department has received a \$3500 CDOT Click it or Ticket grant for 2025.

The police department has received multiple regional POST scholarships for advanced training in multiple disciplines.

TOWN COUNCIL GOALS & OBJECTIVES:

Parking Enforcement: The police department is actively enforcing parking violations in the restricted areas.

Community Communications: The police department has an active online presence to provide information flow to the public through its use of Facebook.



AGENDA BRIEF

MEETING: Town Council - 16 Sep 2025

FROM: Karl Johnson, Public Works Director

PROJECT: Public Works Department Update

ACTION: Council Information

PURPOSE/BACKGROUND:

Staffing/Other:

- Staff has been working on a Sewer account audit.
- Staff has been participating in CDOT's Southwest 2050 Regional Transportation Plan updates.
- PW Streets is completely staffed.
- PW Facilities is completely staffed.
- PW Utilities is completely staffed.
- Staff continues to review and edit the construction standards for work on public property including Streets, Sanitation, and Facilities.
- Staff has found additional language to continue updates to the Right of Way permit to better reflect Town's Municipal Code, and updates in industry standards, additional changes to verbiage under review.
- The Town continues to promote iWorq as a way for the community to bring maintenance items to the Town's attention.
- Staff has been in training for new Iworq modules including fleet, permitting, and cemetery.
- Staff has submitted initial drafts of the 2026 budgets.

PROJECTS/ADMINISTRATION:

Status of projects:

- Staff has been working with WW Clyde on CDOT Hwy 160 Project. Conflict Utilities and Street light locations.
- Staff has been working with WW Clyde on TOPS associated projects in conjunction to CDOT Hwy 160 Project. Sewer services not in conflict, fire hydrants, and side street improvements.
- Staff has been re-working 10 year Capital Plan to a more manageable 5 Year Plan for current budget and near future budget processes.

Streets Division:

- Staff has is working on tree trimming along Town rights of way.
- Staff has been meeting with Utility providers to review updates to Right of Way permitting process.
- Staff has been working with Davis Engineering to complete Hwy 160 reconstruction interfacing project design completion.
- Staff has been performing maintenance on equipment.
- Staff completed training opportunities for multiple staff members.
- Staff has been making additions to heavy equipment for safety improvements.
- Staff completed cemetery corner marking posts at Hill Top Cemetery.
- Staff has reviewed work completed by Black Hills energy's sub-contractor for satisfactory completion. Project areas are being monitored for warranty issues.
- Staff is investigating Lewis St along the 200 block with a major settling. A site visit was conducted on July 10th to asses and develop an action plan for repair.
- Staff is monitoring the 2025 Black Hills steel pipe replacement project plans for review, and is developing a sequencing plan to minimize sanitary system and paving improvement conflicts.
- Staff has been working on temporary signage on parking locations, rules of stay and wayfinding.
- Performing a sign inventory with inspection, repair and replacement.

- Staff has completed installation of signage at Country Center Drive.
- Street sweeper is down after a failure of the onboard computer and ignition starter.
- Staff assisted in cleaning of drain at geothermal fountain at Overlook deck.
- Installation of road closure barricades on Hermosa St near Town park for special events.

Facilities/Fleet Division:

- Staff has been performing maintenance on HVAC units at all Town facilities.
- Staff has been working on office realignment at Town Hall, and installation of additional partition walls.
- Staff has been working on safety upgrades at Town shop.
- Staff has taken delivery of two new pickups with the Fleet/Facilities F150 being the electric Lightening version. Installation of a charging unit at the Maintenance Shop has been completed.
- Staff is assisting JJ Cane with 6 fleet vehicles to be auctioned off before end of June 2025. As of July 9th 5 vehicles have been paid for with 4 vehicles having been picked up and the 5th working on scheduling for pickup. The one vehicle that was not paid for will be re-auctioned at the next JJ Cane auction.
- Staff has been assisting the remodel project with Synergy Builders, LLC for Town Hall remodel project.
- Staff has requested for a re-bid of the window film project at Town Hall.
- Staff working on ADA compliance improvements.

Utilities Division:

- Staff has reviewed McCabe Creek crossing and Florida upgrade designs and project is currently out for RFP.
- Staff working with WW Clyde on Geothermal line replacement as part of the CDOT Hwy 160 reconstruction project.
- PS 2 suffered a failure of the remaining submersible pump in the wet well on June 16th. Staff worked with controls contractor Browns Hill Engineering to force the pump to run in hand position only. Staff took alternating shifts throughout the night to monitor and run the pump in hand avoiding a sanitary sewer overflow. Staff worked to schedule a crane to assist with the relocation of a wet well pump from PS 1 to PS 2 to resume automated pumping operations.
- Staff picked up a used crane service truck from an auction house in Marshall TX.
- Staff procured a rental by pass pump for PS 2, and assisted pump contractor Velocity (Water Technology Group) with the recently purchased crane truck.
- Staff plans on dropping off the two failed wet well pump at the manufacturer for warranty inspection and possible rewinding of motor. Manufacturer will deliver pumps back to Pagosa Springs after any potential repairs.
- Staff has initiated conversations with CDPHE to resurrect the process to construct a new WWTP at the lagoon property.
- Staff has been video inspection of mainlines for the CDOT Hwy 160 project for pre-construction existing conditions, and assisting in locating existing service lines along the CDOT Hwy 160 project. Staff has re-inspected the 100 and 200 blocks of Hwy 160 to verify installation of new taps and service lines are to PSSGID standards.
- Staff decommissioning of septic systems on Goodman Property. Final stages of this project has been push out to end of June with PS1 and PS2 pump service needs.
- Project still pending. Staff has taken water samples from old lagoon that was affected by a 2019 SSO event that wasn't mitigated. Sample results are being reviewed and we will go out to bid for clean up and a re-decommissioning of the lagoon. Testing results have been sent to Roaring Fork Engineering to assist in developing action plan.
- Staff has met with A CIRSA Electrical Engineering Forensic Inspector on site at PS 2 as part of an insurance claim for this incident. Report pending. Staff responded to a alarm status at LS 2 on April 15th, a lightning strike happen near the facility and station experienced a power surge resulting in approximately \$35,000 in electrical equipment damage and the loss of two out of three electrical legs on one of the submersible pumps. Some of the electrical equipment has been replaced, and a replacement pump has been ordered with an minimum of a twelve week lead time for shipment. Working on proposal for critical spares.
- Scheduling still pending with LPEA. KOA LS upgrades are 95% complete. All pumps, piping, and new controls installed and functioning. Electrical power supply upgrades scheduled for May 2025 with LPEA and Controls contractor.
- As time permits, staff is conducting grease trap inspections at various restaurants within the sanitary district.
- Staff is continuing to perform jetting in troublesome areas within the District.

- Continue engineering design of the worst of the worst Category 5 inspected areas.
- Staff is preparing RFQ documents for engineering and design for sewer main replacements.
- Staff is preparing RFQ documents for installation contractors for sewer main replacements.
- Staff has been meeting to discuss a manhole replacement on S 5th St near the Geothermal building.
- Staff is working with the Fleet Division to accommodate failing service vehicle.
- Staff has been locating per 811 requests.
- Staff has been working on replacement project budget and the 2025 operations budget.
- Staff is in planning to schedule 5 new sewer taps in the next few months for new construction.
- Staff has been working with Roaring Fork Engineers to refine the Capital Improvement budget for the PSSGID revitalization and replacement project.
- Staff has purchased equipment and piping to start Category 4 repairs, and is developing a tentative schedule for Spring and Summer 2025.
- Staff has been working with Davis Engineering and Developer of Eagle Mountain project to ensure new sewer line needs for the project are installed before Hwy 160 paving.
- Staff is continuing to develop Capital and supplies lists needed for Category 4 repairs. Biggest need is a Track Steer and a Service Truck with a crane.
- Staff has been supporting SOS community presentations.
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AGENDA BRIEF

MEETING: Town Council - 16 Sep 2025

FROM: James Dickhoff, Development Director

PROJECT:	Ordinance 1018, Second Reading, an Ordinance Annexing Certain Municipal Owned Property known as 1040 East U.S. Highway 160
ACTION:	Council action

PURPOSE/BACKGROUND:

On September 2, 2025, the Town Council approved the First Reading of Ordinance 1018, Annexing Certain Municipal Owned Property known as 1040 East U.S. Highway 160.

On May 05, 2025, the Town purchased 1040 E. Hwy 160 for the development of a new public river access park.

The property is within the Archuleta County's jurisdiction and is eligible for annexation into the Town's boundary, as an "Unilateral Annexation" process pursuant to C.R.S. 31-12-106, allowing annexation without the need for the petitioning process since the Town is the property owner. The remaining annexation requirements still apply and are in compliance for the Unilateral Annexation of municipal owned property.

CRS 31-12-106(3) Annexation of unincorporated municipally owned land.

C.R.S. 31-12-106 statute expressly permits annexation of unincorporated land owned by the annexing municipality, by ordinance, without notice and hearing. The property still must have the required one-sixth contiguity under Colorado Revised Statute § 31-12-104 and meet the requirements of Colorado Revised Statute § 31-12-105 and section 30(1)(c) of Article II of the Colorado Constitution. The annexing ordinance must state that the area proposed to be annexed is owned by the annexing municipality and is not solely a public street or right-of-way.

Ordinance 1018 Exhibit B is a property survey plat, that will be replaced with an annexation plat that will require the Mayor's signature. The annexation plat is expected to be completed in the coming weeks containing the requirements for such.

ATTACHMENTS:

[Ordinance 1018 Annexing 1040 E. Hwy 160 - TC 09.03.25](#)

FISCAL IMPACT:

Preparation of Annexation Plat and Recordation Fees will be approximately \$1,500.

RECOMMENDATIONS:

1. Move to Second the First Reading of Ordinance 1018, Annexing Certain Municipal Owned Property known as 1040 East U.S. Highway 160.
2. Move to Deny Ordinance 1018, Providing Direction to Staff.

TOWN OF PAGOSA SPRINGS, COLORADO

**ORDINANCE NO. 1018
(SERIES 2025)**

**AN ORDINANCE ANNEXING CERTAIN MUNICIPAL OWNED PROPERTY
KNOWN AS 1040 E. U.S. HWY 160
TO THE TOWN OF PAGOSA SPRINGS, COLORADO**

WHEREAS, the Town of Pagosa Springs (“Town”) is a home rule municipality duly organized and existing under Article XX of the Colorado Constitution and the Pagosa Springs Home Rule Charter of 2003, as amended; and

WHEREAS, Section 11.2.A. of the Charter provides that the Town Council may adopt land use and development ordinances, including but not limited to zoning ordinances, subdivision ordinances, annexation processes and an official map of the Town; and

WHEREAS, the Town has provided in the Pagosa Springs Municipal Code (“Code”), within Chapter 21 (“Land Use Development Code”), Article 11, regulations for annexing property into the town boundaries, for the purpose of promoting the health, safety, and general welfare of the Town; and

WHEREAS, on May 5, 2025 the Town of Pagosa Springs purchased 1040 E. U.S. Hwy 160 (“Property”) for the purpose of developing a public river access park; and

WHEREAS, the Property is owned by the annexing municipality, the Town of Pagosa Springs, and is not a public street or right-of-way; and

WHEREAS, the Property is eligible for “Unilateral Annexation” pursuant to Colorado Revised Statutes (C.R.S.) 31-12-106, allowing the annexation solely by Ordinance; and

WHEREAS, all applicable eligibility requirements for Unilateral Annexation are in compliance with the Municipal Annexation Act of 1965 and the Pagosa Springs Municipal Code including but not limited to; Not less than one sixth (1/6th) of the perimeter of the Property is contiguous with the Town and a community interest exists between the Property and the Town; and

WHEREAS, the Town Council does hereby find and determines that it is in the best interests of the Town to annex the Property into the Town’s boundary.

Ordinance 1018

NOW, THEREFORE, BE IT ORDAINED BY THE TOWN COUNCIL OF THE TOWN OF PAGOSA SPRINGS, COLORADO, as follows:

Section 1. Incorporation. The recitals set forth above are incorporated and ordained as if set forth in this section in full.

Section 2. Annexation. The Property, legal description herein attached as Exhibit A, and Plat Map herein attached as Exhibit B, is hereby annexed to the Town of Pagosa Springs, Colorado, and made a part of said Town.

Section 3. Filings. Within thirty (30) days after the effective date of this Ordinance, the Town Clerk shall:

- a. File one copy of the annexation plat map with the original of this Annexation Ordinance in the office of the Clerk of the Town of Pagosa Springs, Colorado.
- b. File for recording this Annexation Ordinance and plat map of the area annexed containing a legal description of such area with the County Clerk and Recorder, with a written request that the Clerk and Recorder file one certified copy of such Annexation Ordinance and map with the Division of Local Government of the Department of Local Affairs and one certified copy of such Annexation Ordinance and Map with the Department of Revenue.

Section 4. Effective Date. This Ordinance shall become effective and be in force immediately upon final passage at second reading.

Section 5. Severability. If any portion of this Ordinance is found to be void or ineffective, it shall be deemed severed from this Ordinance and the remaining provisions shall remain valid and in full force and effect.

Ordinance 1018

INTRODUCED, READ, AND ORDERED PUBLISHED PURSUANT TO
SECTION 3.10, A) AND 3.9, B) OF THE PAGOSA SPRINGS HOME RULE
CHARTER, BY THE TOWN COUNCIL OF THE TOWN OF PAGOSA SPRINGS,
COLORADO, UPON A MOTION DULY MADE, SECONDED AND PASSED AT ITS
REGULAR MEETING HELD AT THE TOWN OF PAGOSA SPRINGS, ON THE
DAY OF , 20 .

TOWN OF PAGOSA SPRINGS,
COLORADO

By: _____
Shari Pierce, Mayor

Attest:

April Hessman, Town Clerk

FINALLY ADOPTED, PASSED, APPROVED, AND ORDERED PUBLISHED
PURSUANT TO SECTION 3.9, D) OF THE PAGOSA SPRINGS HOME RULE
CHARTER, BY THE TOWN COUNCIL OF THE TOWN OF PAGOSA SPRINGS,
COLORADO, UPON A MOTION DULY MADE, SECONDED AND PASSED AT ITS
REGULAR MEETING HELD AT THE TOWN OF PAGOSA SPRINGS, ON THE
DAY OF , 20 .

TOWN OF PAGOSA SPRINGS,
COLORADO

By: _____
Shari Pierce, Mayor

Attest:

April Hessman, Town Clerk

**EXHIBIT A
LEGAL DESCRIPTION**

1040 E. U.S. Highway 160

The Land is located in the County of Archuleta, State of Colorado and described as follows:

A tract of land lying and being in the SE1/4NW1/4 and NE1/4SW1/4 of Section 18, Township 35 North, Range 1 West, N.M.P.M., Archuleta County, Colorado, being a tract of land lying South of the center-line of the San Juan River and North of the North right-of-way line of U.S. Highway No. 160, and being more particularly described as follows, to-wit:

BEGINNING at the point where the West Boundary line of the said NE1/4SW1/4 of Section 18 intersects the North right-of-way line of said U.S. Highway No. 160, whence the Northeast corner of the Townsite of Pagosa Springs bears North 64° 44' West, 1479.09 feet;

Thence running from said point of beginning along the West boundary line of the said NE1/4SW1/4 and the SE1/4NW1/4, Northerly, 110.34 feet, more or less to the center of the said San Juan River;

- " up the center of the San Juan River, South 73° 23' East, 197.42 feet;
- " up the center of the San Juan River, South 89° 45' East, 447.3 feet;
- " up the center of the San Juan River, North 71° 22' East, 211.9 feet;
- " up the center of the San Juan River, North 57° 46' East, 570 feet, more or less to the East boundary line of the said SE1/4NW1/4;
- " along said East boundary line of the SE1/4NW1/4, Southerly, 160 feet, more or less, to the said North right-of-way line of U.S. Highway No. 160 (the Colorado Department of Highways R/W Map shows that the North 1/4 corner of said Section 18 bears North, 2489.9 feet, from this point);
- " along the arc of a curve to the right in a westerly direction, 806.8 feet, to P.S.C. at Sta. 19/89.1 of said Highway No. 160;
- " along said North right-of-way line, North 88° 32' West, 389.2 feet;
- " along said North right-of-way line, North 71° 23' West, 103.48 feet;
- " along said North right-of-way line, approximately North 88° 54' West, 88 feet, more or less, to the point of beginning.

LESS AND EXCEPT that tract of land as conveyed to Bi-State Financial Services in Warranty Deed recorded June 12, 1990 as Reception No. 172154.

Ordinance 1018

**EXHIBIT B
ANNEXATION MAP**

CERTIFICATE OF PUBLICATION

I, the duly elected, qualified and acting Town Clerk of the Town of Pagosa Springs, Colorado, do hereby certify the foregoing Ordinance No. 1018 (Series 2025) was approved by the Town Council of the Town of Pagosa Springs on first reading at its **regular** meeting held on the ____ day of _____, 20__, and was published by title only, along with a statement indicating that the full text of the Ordinance is available at the office of the Town Clerk, on the Town's official website, on _____, 20__, which date was at least ten (10) days prior to the date of Town Council consideration on second reading.

IN WITNESS WHEREOF, I have hereunto set my hand and affixed the seal of the Town of Pagosa Springs, Colorado, this ____ day of _____, 20__.

April Hessman, Town Clerk

(S E A L)

I, the duly elected, qualified and acting Town Clerk of the Town of Pagosa Springs, Colorado, do hereby certify the foregoing Ordinance No. 1018 (Series 2025) was approved by the Town Council of the Town of Pagosa Springs on second reading, at its **regular** meeting held on the ____ day of _____, 20__, and was published by title only, along with a statement indicating the effective date of the Ordinance and that the full text of the Ordinance is available at the office of the Town Clerk, on the Town's official website on _____, 20__.

IN WITNESS WHEREOF, I have hereunto set my hand and affixed the seal of the Town of Pagosa Springs, Colorado, this ____ day of _____, 20__.

April Hessman, Town Clerk

(S E A L)



AGENDA BRIEF

MEETING: Town Council - 16 Sep 2025

FROM: Karl Johnson, Public Works Director

PROJECT: Geothermal water rates study for the Town of Pagosa Springs for 2025

ACTION: Council information and staff direction.

PURPOSE/BACKGROUND:

The 2009 Geothermal discharge water lease with The Springs Resort calls for the Town of Pagosa Springs to set the rate for the leased water to be set at a "Fair Market Value" beginning January 1, 2024. The 2009 contract treated the geothermal resource as simply heat from the Town's heat exchange system. The Town is supplying BTUs of hot water year round with temperatures ranging from 118 to 140 degrees F and up to 450 GPM of energy heating floors, sidewalks, handrails, and hot water. In addition to the heat the water is also providing the geothermal water has significant healing attributes of the mineral content for use in their spa and pools. The traditional geothermal heating utility customers do not have the benefit of direct use of the healing mineral water with the heat exchange to potable water that is circulated in the system. Thus a fair market value approach to the Town's resource makes it necessary to have two components to the rate, one for energy available for heating plus a separate rate for spas that are utilizing the healing water's mineral content of the Town supplied resource.

General users of the Geothermal Utility had an increase of rates from 2022/23 heating season to the 2023/24 heating season of 100% for our largest users. Rates for the 2023/24 to the 2024/25 heating season will see an increase of 50% for these same users with an escalation of 2% inflation going forward in future years.

On September 19, 2024 Council and Staff discussed the following rate structure, and adopted this rate as part of the 2025 budget and fees.

Fair Market Value for Energy: Utilizing the same increase structure as the utility's larger users explained above if we take what the Springs was paying from 2019 to 2022 and increased that number by 100% and then by 50%, the total would be \$2,084/month or \$25,007.40 annually to get to the rate for 2025 and adding an additional 2% to set future rates going forward beginning in 2026. Could also consider changing the 2% to the actual CPI index for the future increases. Current CPI is 2.5%.

Fair Market Value for Mineral Water: There is currently no better way to represent fair market value for the mineral water benefit than what the spas charge for an individual daily soak. This charge represents the price of one daily entrance fee per month per pool for all spas that use Town leased geothermal water.

After this discussion the Springs Resort questioned the methodology for the new rates adopted, and Staff was asked to request a rate study for the geothermal utility. Roaring Fork Engineering performed the rate study requested and the report is attached. In this report there are multiple scenarios proposed with scenario #1 most resembling Staff's proposal from September 2024 adopted by Council.

ATTACHMENTS:

[Preliminary Engineering Report 250910](#)

[Geothermal Rate Study 2025 Final](#)

FISCAL IMPACT:

Increase in revenue for the Geothermal Utility up to a minimum of \$45,107.40

TOWN COUNCIL GOALS & OBJECTIVES:

#7. Geothermal System- Ensure a well-functioning, updated geothermal heating utility that is financially solvent and a source of community pride.

RECOMMENDATIONS:

1. Accept rate study report supporting current rates for 2025 and 2026.
2. Accept rate study report supporting current rates for 2025 and go to Towns voters to approve a new proposed Mineral fee for the Fair Market for the Mineral Water.
3. Advise Staff for alternatives.



2025 Geothermal Rate Study

Town of Pagosa Springs

Pagosa Springs, CO

Prepared by:

Roaring Fork Engineering
592 Hwy 133
Carbondale, CO 81623

September 2025

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1.0 PROJECT AND SYSTEM BACKGROUND

The Town of Pagosa Springs (Town) geothermal water system, installed in 1981, operates as a closed-loop system consisting of Transite piping, two distribution loops with multiple air release valves (ARVs), and a distribution pump with a current operating capacity of 375 gallons per minute (GPM) and a total capacity of 700 GPM. **Figure 1** is a Process Flow Diagram (PFD) from Plummer's Geothermal Assessment, illustrating the system's operational flow and major equipment components. It should be noted that this PFD includes a process for potential geothermal electric generation installation, which is not currently in place.

The system sources water from two wells, Well 3 and Well 5. Well 5 is the primary well, and under normal operations Well 3 is not in use. A third well, the Rumbaugh Well, is leased to Overlook Hot Springs, which uses its raw geothermal water. The system supports both residential and commercial building heating with geothermally heated water and hot spring mineral soaking with raw geothermal water.

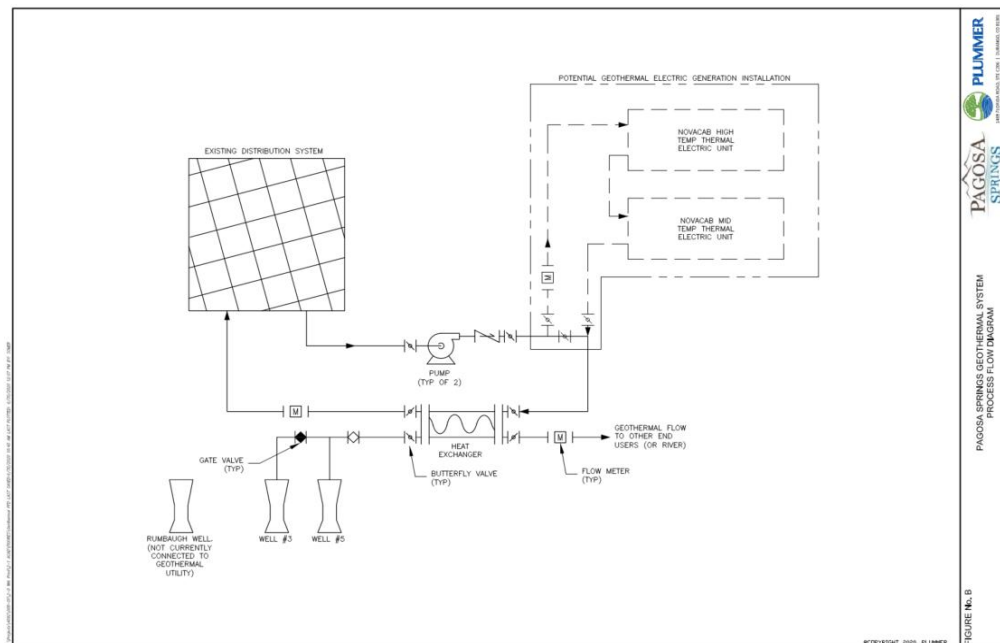


Figure 1 – Process Flow Diagram (Plummer Geothermal Assessment)

A technical memorandum completed by Plummer in 2020, reviewed existing conditions, existing demands and capacity for system expansion, and recommended major capital improvements. Plummer's assessment outlined three key recommendations for system improvements: maintenance and cleaning of the heat exchanger, replacement and insulation of the distribution system, and reinstating meter-based usage calculations for billing. The Town is working towards completing the two capital improvement recommendations. This study is evaluating the best rate structure, billing method, and identifying the necessary revenue requirements for the Town's system to continue to operate.

2.0 STUDY PURPOSE AND ASSUMPTIONS

The Town would like to identify the revenue requirements to operate and maintain the geothermal system, given the recently identified capital projects. All the identified capital projects in the 2020 Assessment completed by Plummer are being pursued as the system has largely reached the end of its useful life. The financial goal is to self-fund a majority of the projects, however, the larger distribution system replacement project will likely need to be funded with a low-interest loan given the high cost of a complete replacement.

To determine the required revenue to fund the identified capital projects, cost estimates calculated in the Plummer Assessment were adjusted to account for inflation and recent upgrades conducted since 2020. Additional capital projects, such as well replacement and rehabilitations, were identified and planned to occur over the next 20 years of operation.

Typical of future cash flow analyses, several critical assumptions were made. These assumptions should be reviewed annually, and the study updated if any assumption changes. All assumptions apply to both proposed rate structures. The key assumptions used in the rate structure calculations include:

1. Using historical audit and budget data, the operating expenses remain relatively consistent. These expenses were extrapolated with a 3% annual increase to account for inflation, increasing demand in limited labor, and shortage of industrial construction materials.
2. No grant funding was assumed to be awarded for any planned short-term capital or ongoing maintenance projects. This is a conservative assumption, so the Town does not rely on external funding sources, which are out of the Town's control.
3. It is assumed that the Overlook Hot Springs uses 35 GPM and The Springs Resort uses 350 GPM.
4. Given the recent East Loop distribution pipeline replacement of 260 LF and the upcoming CDOT project, which includes approximately 1,000 LF of distribution line replacement, Plummer's cost estimate of \$3,962,000 for the distribution system replacement should be lowered to account for work completed to date. Using a price per linear footage the cost was adjusted to account for the 1,000 LF of replacement and previous 260 LF of replacement.
5. The cost for the distribution system project is assumed to be paid for using a municipal bond, at a 5.5% interest rate and a 30-year term. It is assumed that the work will take place in 2030, and as such a 3% inflation rate per year was added to the original adjusted cost estimate.
6. A debt service reserve will be required for any loan taken to complete the project and is included in the 20-Year Cash Flow.
7. No new customers are expected to tap into the system and no existing customers are expected to cease their usage.
8. The Town's current (2025 Budget) Reserve balance is \$188,718.
9. The recommended O&M, capital, and debt service reserves are noted each year in the cash flow. Final details on creating new reserve accounts for these intended purposes should be discussed with the Town's legal and financial team.

10. The Electric Generation Installation illustrated in **Figure 1** and explored in Plummer's Geothermal Assessment is not being pursued by the Town at this time. This would have a large impact on the Rate Study. The Rate Study should be reevaluated if this assumption changes.
11. The Springs Resort has recently added 78 hotel rooms and 75,000 square feet, with 24 new hot springs pools. The Rate Study has includes these recent additions and the appropriate fees have been incorporated into the proposed Hot Springs Operating Fee.

3.0 CURRENT RATE EVALUATION AND COMPARISON

3.1 FINANCIAL EVALUATION

An overview of the Town of Pagosa Spring's financial evaluation is summarized below. It should be noted that the Town received a \$140,390 grant in 2024 with a 1-to-1 spending match. That money was not spent in 2024, and therefore the 2025 budget also includes the grant funding under Revenue as a carryover.

Table 1 – Historical Revenues and Expenditures

Functional Cost Group	2023 (Audit)	2024 ¹ (Estimate)	2025 ¹ (Budget)
Total Revenue	\$61,485	\$247,639	\$252,390
Total Expenditures	\$41,304	\$47,325	\$314,081
Net Income	\$20,181	\$200,314	(\$61,691)
Ending Reserve Balance	\$50,095	\$250,409	\$188,718

NOTES:

1. The 2024 and 2025 revenues and expenditures were shared from Town staff. Audit data for 2024 is not yet available, and a detailed 2025 budget has not been published as of April 2025.

3.2 TOWN OF PAGOSA SPRINGS CURRENT RATES

The Town of Pagosa Springs provides geothermal water to several main customer types: residential, commercial, and hot springs resorts. There are 34 total customers, and each customer type pays a flat monthly rate depending on the classification. Currently, all residential customers are billed the same flat monthly fee. Commercial users are billed a flat monthly rate which is based on square footage. The Springs Resort and The Overlook are each charged a flat monthly rate which is dependent on the flow and assumes heat consumption (per Therm) that each resort uses.

In 2009, Resolution 2009-16 was passed, establishing rates for geothermally heated water and raw geothermal water at \$0.60 per Therm and \$0.10 per Therm, respectively. The resolution states that Pagosa will provide geothermally heated water at a 30% discount from the "prevailing prices for residential, commercial, and large volume users for comparable natural gas service". The Resolution also stated that raw geothermal water will be provided at a 90% discount from natural gas prices.

Historically, residential users were charged based on actual heat usage. However, in 2014, the Town transitioned to a flat-rate system, calculated based on the past eight years of usage data. Currently, residential users pay a fixed monthly rate of \$62.42, while commercial rates are based on square footage using a tiered structure. Current (2025) user fees are shown in **Table 2**.

Table 2 – 2025 User Fees

User	Fee
Residential Rate	\$62.42/month
Commercial Rate	
<2000 sf	\$107.10/month
2001-5000 sf	\$267.75/month
5001-9000 sf	\$749.70/month

>9000 sf	\$1071.00/month
The Springs Resort Usage (350 GPM)	\$2084/month
The Springs Resort Mineral Fee	\$1675/month
The Overlook Usage (35 GPM)	\$299.18/month
The Overlook Mineral Fee	\$390/month
Tap Fee	\$6,000

It is important to note that the total water rights for the Town's geothermal system is 450 GPM. The Springs Resort uses approximately 78% of the system's water rights. The Overlook uses 100% of the water right from Rumbaugh Well.

3.3 REYKJAVÍK, ICELAND GEOTHERMAL RATES

Geothermal energy has provided many communities with district heating and mineral soaking benefits. Pagosa Springs explored similar communities for guidance in setting rates. Like Pagosa Springs, Reykjavik, Iceland, utilizes direct-use geothermal heating for residential purposes and soaking pools. According to Reykjavik's 2024 geothermal pricing, billing is based on water flow (m³), with rates set at approximately \$1.29 per m³ for urban residential use and \$0.65 per m³ for pools—offering about a 50% discount for pool heating¹.

Veitur, Reykjavik's energy provider, confirmed that along with swimming pools, hot spring spas in Iceland similar to The Springs Resort and Overlook Hot Springs are given about a 50% discount on their geothermal water compared to residential and commercial rates for geothermal water. It is important to note that these spas receive electric generation plant discharge water, where revenue is generated for the community by selling the water for thermal use. The Pagosa Geothermal System does not generate electricity, so this rate model and geothermal system is not exactly comparable but does recognize the importance of generating revenue for the system.

For example, the Blue Lagoon Hot Springs, is downstream of a large electrical generation plant, where the water used to be discharged back to a river without any downstream use. Therefore, the Blue Lagoon concept provided a use for an otherwise by-product of an industrial process. HS Orka, the geothermal plant extracting the geothermal water, was unable to share their rates for the Blue Lagoon.

3.4 SIMILAR HOT SPRING COMMUNITIES

Additionally, several US based communities were also contacted regarding the geothermal water rate structures used. Glenwood Springs geothermal pools are operated completely privately, therefore rates are set based on their cost and operations. Ouray Colorado operates a municipal hot spring pool. Since the Town operates the system internally, there is no fee or rate structure involved with the delivery of the geothermal water to the pools. Lastly, Boise Idaho was also contacted regarding their hot springs rate structure. Boise bills based on water metered at each residential home and at the hot springs pools. The Boise system encompasses hundreds of users and therefore capital and operating costs have a larger customer base to spread out costs than the Pagosa Springs system has.

¹ Verðskrá Fyrir Heitt Vatn á Veitusvæði Veitna - Veitur. (2024b, August 1).
https://www.veitur.is/sites/veitur.is/files/atoms/files/heildarverðskra_hitaveitu_01.01.2020_0.pdf

Because of the unique structure of geothermal resources for each community, it is hard to define a standard rate practice. Instead, it is clear that each community must assess the system's users and needs to develop the most practical and meaningful long-term rate structure and rates.

4.0 REVENUE REQUIREMENTS

The first step to setting rates for any utility is identifying the anticipated expenditures that will take place over a defined period of time. Using the recommended projects from Plummer's report and existing operating expenditures, RFE calculated the total annual expenditures over a 20-year period in a cash flow spreadsheet. The total annual expenditures are referred to as the "revenue requirement" for a utility, which *Principles of Water Rates, Fees, and Charges* defines as "the summation of the operation, maintenance, and capital costs that a utility must recover".

In their Geothermal Assessment, Plummer identified two major capital projects: heat exchanger maintenance (\$35,032) and distribution system replacement and insulation (\$3,962,000). The distribution piping has been in use for nearly 45 years and is approaching the end of its life. Because of the high mineral content and high temperature, the pipeline condition deteriorates much more quickly than typical water utilities.

In 2020 the total cost of all materials and work for the recommended pipe replacement and insulation was estimated at \$3,962,000. Approximately 260 linear feet of 6-inch distribution line was replaced in 2025 and approximately 1,000 linear feet of 6-inch distribution and return line will be replaced as part of an upcoming CDOT project. These lines are part of the overall distribution system replacement cost calculated by Plummer in 2020. Therefore, to adjust for remaining pipe replacement, the cost of 1,260 linear feet of pipe (\$90/LF as determined by Plummer) was removed from Plummer's original construction cost. Additionally, based on current market volatility and rates, a 20% inflation adjustment was made to account for the potential impact increased inflation, which may increase the cost of raw materials. This adjusted cost was then increased 3% annually from 2025 to 2030, when the project is expected to take place. A summary of these assumptions and changes is included in **Table 3**.

Table 3 – Calculated Cost of Distribution System Replacement

Item	Unit Cost	Total Cost
Cost of Distribution System Replacement (Plummer)		\$3,962,000
Previously Replaced Parts – East Side Loop	260 LF @ \$90/LF	-\$23,400
Previously Replaced Parts – CDOT Project	1,000 LF @ \$90/LF	-\$90,000
Assumed Inflation Adjustment	20%	\$769,720
Adjusted Cost of Distribution System Replacement (2020)		\$4,618,320
Adjusted Cost of Distribution System Replacement (2030)		\$6,585,295

The cash flow calculations assume pipe replacement will be funded through a 30-year loan at 5.5% with a monthly payment of \$37,390.58. Additionally, if a loan is not pursued, then portions of the system could be replaced over time, assuming a similar annual expenditure. The heat exchanger maintenance is planned for 2025 and is included in system maintenance cost in the cash flow. Additional maintenance projects each year are lumped into a defined \$30,000 amount to account for ongoing work needed within the system. Each year the \$30,000 cost is increased by 3% to cover for inflation and rising cost of materials and labor.

Although the Plummer Geothermal Assessment found that the wells are in good working condition, RFE conservatively estimates that significant maintenance or complete redrilling of all wells will be required over the next 15 years. A conservative estimate of \$175,000 (approximately \$50,000 per year) was included to cover the cost of three well replacements. All current operating expenditures - including administrative costs, and professional fees - are projected to increase by 3% per year with inflation.

Annual expenditures vary from 2025 onward depending on the capital projects planned for the year. The 20-Year Cash Flow tables report the anticipated expenditures to complete these planned projects. It should be noted that the debt service estimated for the distribution system replacement includes \$448,700, which could also be restructured to replace components of the system over time if a loan is not pursued or awarded.

Several reserves were established and used to set goals during the rate-setting process: an Operation and Maintenance (O&M) Reserve Fund, a Debt Service Reserve Fund, and a Capital Reserve Fund.

The amount that should be saved in each reserve was set based on following benchmarks:

1. **Operation and Maintenance Reserve:** Six months of O&M expenses in the O&M Reserve Fund, which increases annually as the expected O&M expenses increase with inflation. The O&M Reserve Fund balance is approximately \$25,000 to \$100,000. As O&M expenses vary under the circumstances explored in this study, the required O&M Reserve Fund balance adjusts accordingly.
2. **Debt Service Reserve:** One year of debt service payments should be kept in the Debt Service Reserve Fund, which is approximately \$448,700. This is typically required by loan or bond agencies as an agreement with the loan awarded.
3. **Capital Reserve:** The Capital Reserve Fund should have the ability to cover the replacement of several major pieces of equipment in the event of unexpected failure. The amount estimated to cover major components of the system is \$265,000. It is assumed that equipment costs will increase at 10% per year. This cost would cover one pump replacement, one well replacement, emergency heat exchanger repair, and 300 linear feet of piping replacement if a failure were to occur.

5.0 PROPOSED RATE CHANGES

Two scenarios were explored as part of this rate study and are explored further below. Scenario 1 assumes that all required revenue must be generated solely from the geothermal customers. Due to the relatively small number of customers, this results in significant rate increases across all customer groups.

Scenario 2 assumes a portion of the required revenue will be generated directly from ticket sales as small percentage fee charged with each ticket sold. This scenario directs the cost towards visitors of the hot springs who value, benefit from, and enjoy the resource. The alternative revenue stream from ticket sale fees can also be labeled as the geothermal longevity fee, increasing awareness and education on the importance of maintaining and protecting this valuable resource. Public outreach and resources can also be developed for the Overlook and The Springs Resort to share with customers.

5.1 PROPOSED RATE STRUCTURE

5.1.1 SCENARIO 1

Under Scenario 1, a large rate increase is proposed for the largest users of the system in 2026 as this will have the greatest net impact on revenue generation. This will assist the Town in reaching a new baseline operating level from which smaller incremental increases can be adopted each year to help support system maintenance.

Table 4 – Scenario 1: Proposed User Fees

User	2025 (Current)	2026	2027	2028	2029
Residential Rate	\$62.42/mo	\$68.67/mo	\$75.53/mo	\$83.09/mo	\$91.39/mo
Commercial Rate					
<2000 sf	\$107.10/mo	\$117.81/mo	\$129.59/mo	\$142.55/mo	\$156.81/mo
2001-5000 sf	\$267.75/mo	\$294.53/mo	\$323.98/mo	\$356.38/mo	\$392.01/mo
5001-9000 sf	\$749.70/mo	\$824.67/mo	\$907.14/mo	\$997.85/mo	\$1,097.64/mo
>9000 sf	\$1,071.00/mo	\$1,178.10/mo	\$1,295.91/mo	\$1,425.50/mo	\$1,568.05/mo
The Springs Resort	\$2,084.00/mo	\$14,100.00/mo	\$15,510.00/mo	\$17,061.00/mo	\$18,767.10/mo
The Springs Resort ¹	\$0.21/Therm	\$1.41/Therm	\$1.56/Therm	\$1.71/Therm	\$1.88/Therm
The Springs Resort Mineral Fee	-	\$20,100/year	\$20,703/year	\$21,324/year	\$21,964/year
The Overlook	\$299.18/mo	\$1,410.00/mo	\$1,551.00/mo	\$1,706.10/mo	\$1,876.71/mo
The Overlook ¹	\$0.30/Therm	\$1.41/Therm	\$1.56/Therm	\$1.71/Therm	\$1.88/Therm
The Overlook Mineral Fee	-	\$4,680/year	\$4,820/year	\$4,965/year	\$5,114/year
Tap Fee	\$6,000	\$6,000	\$6,000	\$6,000	\$6,000

NOTES:

1. The fee per Therm was calculated based on an assumed flow of 350 GPM for The Springs Resort and 35 GPM for The Overlook and an assumed heat consumption of 327.86 Therms/day for The Springs Resort and 32.78 Therms/day for The Overlook. The purpose of this calculation is to allow for the comparison to natural gas prices.

The projected income and reserves balances for Scenario 1 are shown in **Figure 2**. Although net income is expected to dip below zero for several years, rates were set to ensure minimum reserve balances are

maintained. The total reserves balance includes the capital reserve, O&M reserve, and debt service reserve. The O&M and debt service reserves are not plotted in this figure because the balances are the same or nearly the same year to year.

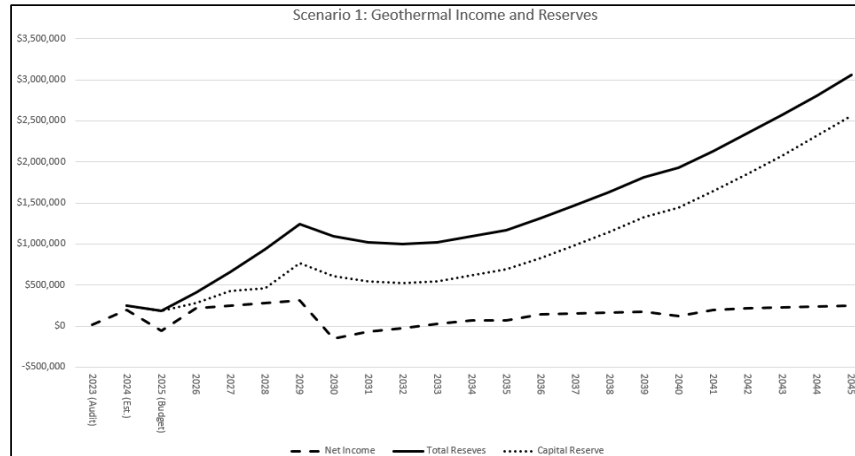


Figure 2 – Scenario 1: Geothermal Income and Reserves.

5.1.2 SCENARIO 2

As an alternative to a large rate increase for the two largest users of the system, a proposed Geothermal System Health Fee is proposed. This fee would directly be paid to the Town at a rate of 2.75% of current ticket prices at the Overlook and Springs Resort. The revenue generated from this fee would employ a full-time geothermal aquifer expert to be employed by the Town to maintain, monitor, and assess the health of the Geothermal aquifer. Additionally, this fee will be used to fund the required ongoing maintenance projects for the system. As a result of the fee, the user rates are not required to increase to the levels described in Scenario 1. This helps spread the cost out of the Geothermal resource on those who utilize the benefits from the system. The proposed rates when implementing a 2.75% tax results in significantly lower user fees, which are summarized in **Table 5**.

Table 5 – Scenario 2: Proposed User Fees

User	2025 (Current)	2026	2027	2028	2029
Residential Rate	\$62.42/mo	\$63.67	\$64.95	\$66.24	\$67.57
Commercial Rate					
<2000 sf	\$107.10/mo	\$109.24/mo	\$111.43/mo	\$113.66/mo	\$115.93/mo
2001-5000 sf	\$267.75/mo	\$273.11/mo	\$278.57/mo	\$284.14/mo	\$289.82/mo
5001-9000 sf	\$749.70/mo	\$764.69/mo	\$779.99/mo	\$795.59/mo	\$811.50/mo
>9000 sf	\$1,071.00/mo	\$1,092.42/mo	\$1,114.27/mo	\$1,136.55/mo	\$1,159.28/mo
The Springs Resort	\$2,084.00/mo	\$2,125.68/mo	\$2,168.19/mo	\$2,211.56/mo	\$2,255.79/mo
The Springs Resort ¹	\$0.21/Therm	\$0.21/Therm	\$0.22/Therm	\$0.22/Therm	\$0.23/Therm
The Overlook	\$299.18/mo	\$212.57/mo	\$216.82/mo	\$221.16/mo	\$225.58/mo
The Overlook ¹	\$0.30/Therm	\$0.21/Therm	\$0.22/Therm	\$0.22/Therm	\$0.23/Therm
Tap Fee	\$6,000	\$6,000	\$6,000	\$6,000	\$6,000

NOTES:

1. The fee per Therm was calculated based on an assumed flow of 350 GPM for The Springs Resort and 35 GPM for The Overlook and an assumed heat consumption of 327.86 Therms/day for The Springs Resort and 32.78 Therms/day for The Overlook. The purpose of this calculation is to allow for the comparison to natural gas prices.

The projected income and reserves balance for Scenario 2 are shown in **Figure 3**. Due to the additional revenue from the Hot Springs Operating Fee, the Town is expected to maintain a positive net income most years while keeping customer rates low. Net income will be negative for several years when the Town begins its loan payment for the distribution system replacement, however, minimum reserve balances will be maintained.

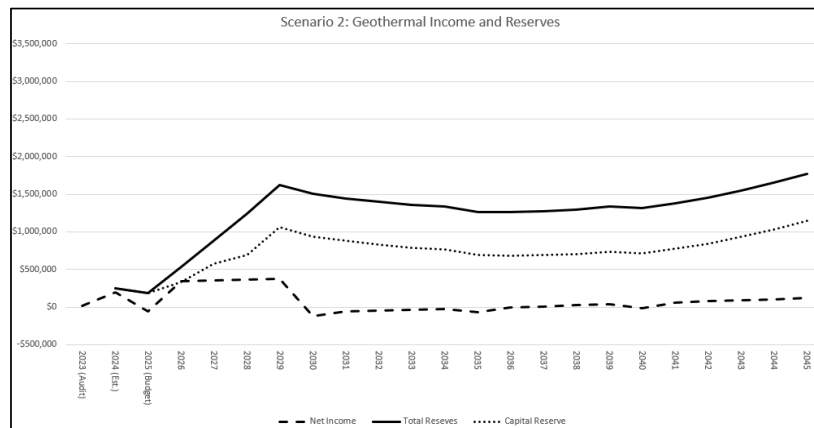


Figure 3 – Scenario 2: Geothermal Income and Reserves

Based on RFE's research into geothermal utilities in Iceland and in the US, it is common for commercial customers to pay a discounted rate for geothermal water. However, this occurs when the municipality is an owner or operator of those hot springs, electric generation is occurring, or a larger population is utilizing geothermal energy. The Pagosa Geothermal System serves a relatively small residential and commercial population, with the largest users receiving the geothermal waters to utilize for private businesses. The Town recognizes the importance of these businesses within the community but also acknowledges that due to the age of the system, value of the resources, and necessary cost to update and further maintain the system requires a more equitable rate structure. Scenario 2 offers a solution to minimize user rate increases and directly tie revenue generation to customer usage.

The Town of Pagosa Springs provides reliable energy and resource at a stable price, which is not subject to market volatility, or physical availability (e.g. non-renewable sources). However, this resource is lacking adequate funding to maintain, replace, monitor, and operate the system. Therefore, the cost necessary to maintain, and protect this resource also presents a non-monetary value which cannot be replaced.

5.2 CUSTOMER CLASS RATE ADJUSTMENTS

The main objective for the Town over the next 20 years is to sustainably replace its aging equipment while providing affordable services to its customers. The Town currently utilizes a fixed usage rate for all customers.

To meet the calculated revenue requirement over the next 20 years, revenue will need to increase significantly. Typically, total revenue is approximately \$60,000 per year. Once the distribution replacement debt payments begin in 2030, the required revenue increases to around \$400,000 to \$600,000 annually. This required revenue can be met by increasing user rates or using an alternative revenue source. Scenario 1 proposes significant direct rate increases, which must be paid regardless of revenue generated at the hot

springs resorts and use of the resource. Rates can be increased at one large increase in 2026 or broken up over the next five years to meet the 2030 goal. Currently, the cash flow for Scenario 1 assumes one large increase with smaller increases in subsequent years. Please see **Table 4** for the proposed increases through 2029, after which, rates will increase by 10% through 2035. Rates will then increase at 2% through 2045.

Alternatively, the required revenue can be achieved through applying a ticket fee associated with each ticket sold at the hot springs reports and hotel room rentals as described in Scenario 2. Please see **Table 5** for the proposed increases through 2049. Under Scenario 2, rates will increase by 2% through 2045.

The Town would like to continue charging residential users a flat monthly fee rather than returning to metered charges. The attached Cash Flow spreadsheet assumes flat monthly fees will continue with annual inflation increases. Given the relatively low geothermal usage by residential customers, revenue generated from residential users is proportionally low. Any rate adjustments will proportionally affect larger commercial users more than residential users.

5.3 MINERAL FEE

Scenario 1 proposes a Mineral Fee to help generate the required revenue for the system. As suggested in the September 19, 2024 Agenda Brief, charging both hot springs resorts a flat fee for mineral water would provide the Town with approximately \$24,780 of revenue per year. This fee is based on the number of pools and the daily soaking rate, and it is proposed to increase at 3% per year with inflation but may be adjusted further based on the non-resident daily soaking rate.

The raw geothermal water has high mineral concentrations and is typically very hard. These healing properties of the geothermal water which attract customers at the hot springs resorts, also contribute to premature aging and scaling of the distribution equipment, which requires frequent maintenance and equipment replacement. This is defined as a cost-causative factor and is explored in *Principles of Water Rates, Fees, and Charges*, as it is typical for certain customers to have a larger impact on a treatment or distribution system for any utility. These customers should be charged more to recoup the additional cost incurred by the utility provider to provide them service. Typically, these charges are calculated and assigned directly to the customer receiving the unique service. At this time, the Proposed Mineral Water Fee presents a solution, which is a small portion of revenue (one non-resident using each pool for one day of each month) to help cover this cost. Other methods of calculating Mineral Fees could include a proportional allocation of annual operating expenditures to each customer, which would result in likely a prohibitively high fee amount for hot springs users. This Mineral Fee is not proposed under Scenario 2, as the Hot Springs Operating Fee is expected to provide the system with similar source of revenue on the highest users.

5.4 HOT SPRINGS OPERATING FEE

Scenario 2 proposes implementing a Hot Springs Operating Fee to generate a second stream of revenue, offering an alternative to the Mineral Fee used in Scenario 1. Instead of charging the hot springs resorts directly, the cost is shifted to the hot springs customers as a "turnstile" fee. Specifically, the proposed Hot Springs Operating Tax is a 2.75% surcharge on all tickets sold as well as a 2.25% surcharge on hotel rooms that include hot springs access.

The Hot Springs Operating Fee was incorporated into the 20-Year Cash Flow based on the following assumptions:

1. The Springs Resort sells 122,240 day passes per year at \$67 per pass.
2. The Springs Resort sells 160 local memberships per year at \$480 per membership per year.
3. The Springs Resort sells approximately 25,000 rooms per year and an average cost of \$389 per room.

4. The Overlook sells 18,250 day passes per year at \$30/ticket per pass.

This fee is expected to provide an additional \$460,000 in annual revenue. If implemented, the Town would be able to hire a full-time hydrogeologist and purchase equipment to monitor and maintain the health of the aquifer – an effort that benefits all customers. Hiring and retaining a staff hydrogeologist is estimated to cost \$150,000 per year. The remaining revenue would support the Town's maintenance needs and upcoming capital projects. **Table 6** shows the adjusted day pass and hotel room rates based on the proposed Hot Springs Operating Fee, which assumes a percentage of 2.75% on all soaking passes and 2.25% on hotel rooms that include hot springs access.

Table 6 – Adjusted Prices Under Scenario 2

Resort	Current Price	Projected Price
The Springs Resort Day Pass	\$67	\$68.84
The Springs Resort Local Membership	\$480	\$493.20
Hotel Room at The Springs Resort	\$389	\$397.75
The Overlook Day Pass	\$30	\$30.83

5.5 TAP FEE ADJUSTMENTS

No plant expansion is planned at the moment and the Town is not expecting any income from tap fees in the near future. As such, the change in tap fees was not investigated as part of this study. However, should expansion become viable a change in tap fee for new users buying into a new system should be discussed. If expansion is pursued, RFE recommends reevaluating tap fees, particularly if any large user is proposing to tap into the Town's system. In general, tap fees should increase annually or periodically with inflation.

5.6 RESERVE FUND PAYMENTS

5.6.1 O&M RESERVE FUND

RFE recommends depositing funds into an O&M reserve, which should have the ability to cover 6 months of total O&M expenses. This reserve allows the town to maintain operations for 6 months should payment from customers not be collected for any purpose (natural disaster, etc.). It is assumed that only operating system, administrative, and professional fee expenditures are covered for 6 months. Capital project work would cease under this emergency scenario.

5.6.2 DEBT SERVICE RESERVE FUND

In addition to debt service payments, RFE recommends having a debt service reserve fund, which will be required for any loan agency providing money to the Town. The debt service reserve fund level is typically established as one year's principal and interest payment on all current debt service payments. Since debt service payments are not expected to fluctuate, the reserve fund should be built up now and finalized by 2030 when the Town applies for a new loan for the distribution system.

5.6.3 CAPITAL RESERVE FUND

RFE recommends that the remaining net income be added to the Capital Reserve Fund. It is beneficial to have a healthy reserve to fund large capital improvement projects, so that the Town can respond to any unforeseen construction or project costs. This fund should have the ability to cover the replacement of several major pieces of equipment. This cash flow uses approximately \$265,000 as a minimum balance, which would cover one pump replacement, emergency heat exchanger repair, and 300 LF of distribution

pipings replacement if a leak was discovered. This calculation assumes that equipment costs increase at 10% per year.

Advice from financial advisors and a legal team should be sought to understand if there are any limitations on creating separate reserve funds for each purpose mentioned above. For loan funds, it may be required that a separate reserve is created and is only allowed to be used for debt service payments.

5.7 ALTERNATIVE REVENUE SOURCES

Given the high revenue requirement expected over the next 20 years, the Town is exploring alternative revenue streams to help fund system maintenance. A hot spring pass surcharge was analyzed in this study, but it is possible that a sales tax could be implemented to help fund the system and fund critical aquifer health studies.

6.0 RECOMMENDATIONS AND FUTURE STUDIES

Geothermal water and energy usage is a resource which many communities are not privileged to utilize and benefit from like Pagosa Springs. The current market volatility of energy prices, and decline of natural resources, specifically groundwater aquifer health, makes the Town of Pagosa Springs' Geothermal System a valuable resource which needs to be properly maintained, protected, and sustainably operated. While historic pricing agreements have provided large discounts to users, the Town has identified that this financial model is no longer sustainable to maintain and operate the system. The cost to replace the distribution system, mechanical equipment, and wells requires significant investment from all users to keep utilizing the resource. As such, while the changes are stark to what has been historically charged, the proposed rate structures set a new trajectory for ensuring that the system can be sustainably operated for the next 20 years and beyond. The lack of maintenance and funds to improve or maintain the system could result in a loss of resource to all customers.

The required revenue needed to sustainably support upcoming major capital projects was identified and summarized in previous sections. The proposed rates for each customer class to support these requirements through 2029 can be found in **Table 4** and **Table 5** for Scenarios 1 and 2. The proposed user rates for both scenarios are summarized in the attached 20-Year Cash Flow, which gives a detailed look at the necessary revenue needed to update and maintain the aging geothermal system. Under Scenario 1, significant increases are proposed in 2026 which will be crucial to funding the necessary system upgrades and several recommended and required reserve funds. Scenario 2 explores an alternative source of revenue, the Hot Springs Operating Fee. Several assumptions were made regarding number of ticket sales, hotel room sales, types of tickets, and ticket prices. These assumptions should be reviewed, and the 20-Year Cash Flow and user rates should be reevaluated to account for any change. Additional sources of revenue should be further investigated. It is recommended that the Town adopt either of the proposed rate structures for the next five years, with the ability to maintain or increase at a lower percentage should assumptions change from this study.

APPENDIX A

20-Year Cash Flows

APPENDIX B

Plummer – Pagosa Geothermal Assessment



2025 Geothermal Rate Study

Town of Pagosa Springs

Pagosa Springs, CO

Prepared by:

Roaring Fork Engineering
592 Hwy 133
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September 2025

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APPENDICES

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1.0 PROJECT AND SYSTEM BACKGROUND

The Town of Pagosa Springs (Town) geothermal water system, installed in 1981, operates as a closed-loop system consisting of Transite piping, two distribution loops with multiple air release valves (ARVs), and a distribution pump with a current operating capacity of 375 gallons per minute (GPM) and a total capacity of 700 GPM. **Figure 1** is a Process Flow Diagram (PFD) from Plummer's Geothermal Assessment, illustrating the system's operational flow and major equipment components. It should be noted that this PFD includes a process for potential geothermal electric generation installation, which is not currently in place.

The system sources water from two wells, Well 3 and Well 5. Well 5 is the primary well, and under normal operations Well 3 is not in use. A third well, the Rumbaugh Well, is leased to Overlook Hot Springs, which uses its raw geothermal water. The system supports both residential and commercial building heating with geothermally heated water and hot spring mineral soaking with raw geothermal water.

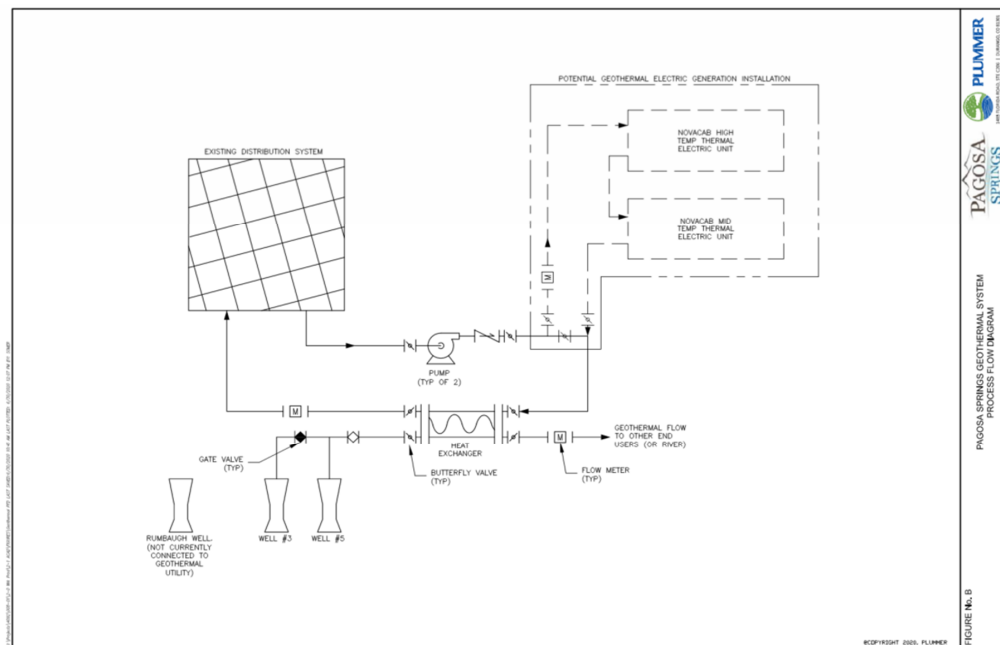


Figure 1 – Process Flow Diagram (Plummer Geothermal Assessment)

A technical memorandum completed by Plummer in 2020, reviewed existing conditions, existing demands and capacity for system expansion, and recommended major capital improvements. Plummer's assessment outlined three key recommendations for system improvements: maintenance and cleaning of the heat exchanger, replacement and insulation of the distribution system, and reinstating meter-based usage calculations for billing. The Town is working towards completing the two capital improvement recommendations. This study is evaluating the best rate structure, billing method, and identifying the necessary revenue requirements for the Town's system to continue to operate.

2.0 STUDY PURPOSE AND ASSUMPTIONS

The Town would like to identify the revenue requirements to operate and maintain the geothermal system, given the recently identified capital projects. All the identified capital projects in the 2020 Assessment completed by Plummer are being pursued as the system has largely reached the end of its useful life. The financial goal is to self-fund a majority of the projects, however, the larger distribution system replacement project will likely need to be funded with a low-interest loan given the high cost of a complete replacement.

To determine the required revenue to fund the identified capital projects, cost estimates calculated in the Plummer Assessment were adjusted to account for inflation and recent upgrades conducted since 2020. Additional capital projects, such as well replacement and rehabilitations, were identified and planned to occur over the next 20 years of operation.

Typical of future cash flow analyses, several critical assumptions were made. These assumptions should be reviewed annually, and the study updated if any assumption changes. All assumptions apply to both proposed rate structures. The key assumptions used in the rate structure calculations include:

1. Using historical audit and budget data, the operating expenses remain relatively consistent. These expenses were extrapolated with a 3% annual increase to account for inflation, increasing demand in limited labor, and shortage of industrial construction materials.
2. No grant funding was assumed to be awarded for any planned short-term capital or ongoing maintenance projects. This is a conservative assumption, so the Town does not rely on external funding sources, which are out of the Town's control.
3. It is assumed that the Overlook Hot Springs uses 35 GPM and The Springs Resort uses 350 GPM.
4. Given the recent East Loop distribution pipeline replacement of 260 LF and the upcoming CDOT project, which includes approximately 1,000 LF of distribution line replacement, Plummer's cost estimate of \$3,962,000 for the distribution system replacement should be lowered to account for work completed to date. Using a price per linear footage the cost was adjusted to account for the 1,000 LF of replacement and previous 260 LF of replacement.
5. The cost for the distribution system project is assumed to be paid for using a municipal bond, at a 5.5% interest rate and a 30-year term. It is assumed that the work will take place in 2031, and as such a 3% inflation rate per year was added to the original adjusted cost estimate.
6. A debt service reserve will be required for any loan taken to complete the project and is included in the 20-Year Cash Flow.
7. No new customers are expected to tap into the system and no existing customers are expected to cease their usage.
8. The Town's current (2025 Budget) Reserve balance is \$188,718.
9. The recommended O&M, capital, and debt service reserves are noted each year in the cash flow. Final details on creating new reserve accounts for these intended purposes should be discussed with the Town's legal and financial team.

10. The Electric Generation Installation illustrated in **Figure 1** and explored in Plummer's Geothermal Assessment is not being pursued by the Town at this time. This would have a large impact on the Rate Study. The Rate Study should be reevaluated if this assumption changes.
11. The Springs Resort has recently added 78 hotel rooms and 75,000 square feet, with 24 new hot springs pools. The Rate Study has includes these recent additions and the appropriate fees have been incorporated into the proposed Mineral Fee under Scenario 2.

3.0 CURRENT RATE EVALUATION AND COMPARISON

3.1 FINANCIAL EVALUATION

An overview of the Town of Pagosa Spring's financial evaluation is summarized below. It should be noted that the Town received a \$140,390 grant in 2024 with a 1-to-1 spending match. That money was not spent in 2024, and therefore the 2025 budget also includes the grant funding under Revenue as a carryover.

Table 1 – Historical Revenues and Expenditures

Functional Cost Group	2023 (Audit)	2024 ¹ (Estimate)	2025 ¹ (Budget)
Total Revenue	\$61,485	\$247,639	\$252,390
Total Expenditures	\$41,304	\$47,325	\$314,081
Net Income	\$20,181	\$200,314	(\$61,691)
Ending Reserve Balance	\$50,095	\$250,409	\$188,718

NOTES:

1. The 2024 and 2025 revenues and expenditures were shared from Town staff. Audit data for 2024 is not yet available, and a detailed 2025 budget has not been published as of April 2025.

3.2 TOWN OF PAGOSA SPRINGS CURRENT RATES

The Town of Pagosa Springs provides geothermal water to several main customer types: residential, commercial, and hot springs resorts. There are 34 total customers, and each customer type pays a flat monthly rate depending on the classification. Currently, all residential customers are billed the same flat monthly fee. Commercial users are billed a flat monthly rate which is based on square footage. The Springs Resort and The Overlook are each charged a flat monthly rate which is dependent on the flow and assumes heat consumption (per Therm) that each resort uses.

In 2009, Resolution 2009-16 was passed, establishing rates for geothermally heated water and raw geothermal water at \$0.60 per Therm and \$0.10 per Therm, respectively. The resolution states that Pagosa will provide geothermally heated water at a 30% discount from the "prevailing prices for residential, commercial, and large volume users for comparable natural gas service". The Resolution also stated that raw geothermal water will be provided at a 90% discount from natural gas prices.

Historically, residential users were charged based on actual heat usage. However, in 2014, the Town transitioned to a flat-rate system, calculated based on the past eight years of usage data. Currently, residential users pay a fixed monthly rate of \$62.42, while commercial rates are based on square footage using a tiered structure. Current (2025) user fees are shown in **Table 2**.

Table 2 – 2025 User Fees

User	Fee
Residential Rate	\$62.42/month
Commercial Rate	
<2000 sf	\$107.10/month
2001-5000 sf	\$267.75/month
5001-9000 sf	\$749.70/month

>9000 sf	\$1071.00/month
The Springs Resort Usage (350 GPM)	\$2084/month
The Springs Resort Mineral Fee	\$1675/month
The Overlook Usage (35 GPM)	\$299.18/month
The Overlook Mineral Fee	\$390/month
Tap Fee	\$6,000

It is important to note that the total water rights for the Town's geothermal system is 450 GPM. The Springs Resort uses approximately 78% of the system's water rights. The Overlook uses 100% of the water right from Rumbaugh Well.

3.3 REYKJAVÍK, ICELAND GEOTHERMAL RATES

Geothermal energy has provided many communities with district heating and mineral soaking benefits. Pagosa Springs explored similar communities for guidance in setting rates. Like Pagosa Springs, Reykjavik, Iceland, utilizes direct-use geothermal heating for residential purposes and soaking pools. According to Reykjavik's 2024 geothermal pricing, billing is based on water flow (m³), with rates set at approximately \$1.29 per m³ for urban residential use and \$0.65 per m³ for pools—offering about a 50% discount for pool heating¹.

Veitur, Reykjavik's energy provider, confirmed that along with swimming pools, hot spring spas in Iceland similar to The Springs Resort and Overlook Hot Springs are given about a 50% discount on their geothermal water compared to residential and commercial rates for geothermal water. It is important to note that these spas receive electric generation plant discharge water, where revenue is generated for the community by selling the water for thermal use. The Pagosa Geothermal System does not generate electricity, so this rate model and geothermal system is not exactly comparable but does recognize the importance of generating revenue for the system.

For example, the Blue Lagoon Hot Springs, is downstream of a large electrical generation plant, where the water used to be discharged back to a river without any downstream use. Therefore, the Blue Lagoon concept provided a use for an otherwise by-product of an industrial process. HS Orka, the geothermal plant extracting the geothermal water, was unable to share their rates for the Blue Lagoon.

3.4 SIMILAR HOT SPRING COMMUNITIES

Additionally, several US based communities were also contacted regarding the geothermal water rate structures used. Glenwood Springs geothermal pools are operated completely privately, therefore rates are set based on their cost and operations. Ouray Colorado operates a municipal hot spring pool. Since the Town operates the system internally, there is no fee or rate structure involved with the delivery of the geothermal water to the pools. Lastly, Boise Idaho was also contacted regarding their hot springs rate structure. Boise bills based on water metered at each residential home and at the hot springs pools. The Boise system encompasses hundreds of users and therefore capital and operating costs have a larger customer base to spread out costs than the Pagosa Springs system has.

¹ Verðskrá Fyrir Heitt Vatn á Veitusvæði Veitna - Veitur. (2024b, August 1).
https://www.veitur.is/sites/veitur.is/files/atoms/files/heildarverðskra_hitaveitu_01.01.2020_0.pdf

Because of the unique structure of geothermal resources for each community, it is hard to define a standard rate practice. Instead, it is clear that each community must assess the system's users and needs to develop the most practical and meaningful long-term rate structure and rates.

4.0 REVENUE REQUIREMENTS

The first step to setting rates for any utility is identifying the anticipated expenditures that will take place over a defined period of time. Using the recommended projects from Plummer's report and existing operating expenditures, RFE calculated the total annual expenditures over a 20-year period in a cash flow spreadsheet. The total annual expenditures are referred to as the "revenue requirement" for a utility, which *Principles of Water Rates, Fees, and Charges* defines as "the summation of the operation, maintenance, and capital costs that a utility must recover".

In their Geothermal Assessment, Plummer identified two major capital projects: heat exchanger maintenance (\$35,032) and distribution system replacement and insulation (\$3,962,000). The distribution piping has been in use for nearly 45 years and is approaching the end of its life. Because of the high mineral content and high temperature, the pipeline condition deteriorates much more quickly than typical water utilities.

In 2020 the total cost of all materials and work for the recommended pipe replacement and insulation was estimated at \$3,962,000. Approximately 260 linear feet of 6-inch distribution line was replaced in 2025 and approximately 1,000 linear feet of 6-inch distribution and return line will be replaced as part of an upcoming CDOT project. These lines are part of the overall distribution system replacement cost calculated by Plummer in 2020. Therefore, to adjust for remaining pipe replacement, the cost of 1,260 linear feet of pipe (\$90/LF as determined by Plummer) was removed from Plummer's original construction cost. Additionally, based on current market volatility and rates, a 20% inflation adjustment was made to account for the potential impact increased inflation, which may increase the cost of raw materials. This adjusted cost was then increased 3% annually from 2025 to 2031, when the project is expected to take place. A summary of these assumptions and changes is included in **Table 3**.

Table 3 – Calculated Cost of Distribution System Replacement

Item	Unit Cost	Total Cost
Cost of Distribution System Replacement (Plummer)		\$3,962,000
Previously Replaced Parts – East Side Loop	260 LF @ \$90/LF	-\$23,400
Previously Replaced Parts – CDOT Project	1,000 LF @ \$90/LF	-\$90,000
Assumed Inflation Adjustment	20%	\$769,720
Adjusted Cost of Distribution System Replacement (2020)		\$4,618,320
Adjusted Cost of Distribution System Replacement (2031)		\$6,782,850

The cash flow calculations assume pipe replacement will be funded through a 30-year loan at 5.5% with a monthly payment of \$38,512.30. Additionally, if a loan is not pursued, then portions of the system could be replaced over time, assuming a similar annual expenditure. The heat exchanger maintenance is planned for 2025 and is included in system maintenance cost in the cash flow. Additional maintenance projects each year are lumped into a defined \$30,000 amount to account for ongoing work needed within the system. Each year the \$30,000 cost is increased by 3% to cover for inflation and rising cost of materials and labor.

Although the Plummer Geothermal Assessment found that the wells are in good working condition, RFE conservatively estimates that significant maintenance or complete redrilling of all wells will be required over the next 15 years. A conservative estimate of \$175,000 (approximately \$50,000 per well) was included to cover the cost of three well replacements. All current operating expenditures - including administrative costs, and professional fees - are projected to increase by 3% per year with inflation.

Annual expenditures vary from 2025 onward depending on the capital projects planned for the year. The 20-Year Cash Flow tables report the anticipated expenditures to complete these planned projects. It should be noted that the debt service estimated for the distribution system replacement includes \$462,100, which could also be restructured to replace components of the system over time if a loan is not pursued or awarded.

Several reserves were established and used to set goals during the rate-setting process: an Operation and Maintenance (O&M) Reserve Fund, a Debt Service Reserve Fund, and a Capital Reserve Fund.

The amount that should be saved in each reserve was set based on following benchmarks:

1. **Operation and Maintenance Reserve:** Six months of O&M expenses in the O&M Reserve Fund, which increases annually as the expected O&M expenses increase with inflation. The O&M Reserve Fund balance is approximately \$25,000 to \$100,000. As O&M expenses vary under the circumstances explored in this study, the required O&M Reserve Fund balance adjusts accordingly.
2. **Debt Service Reserve:** One year of debt service payments should be kept in the Debt Service Reserve Fund, which is approximately \$462,100. This is typically required by loan or bond agencies as an agreement with the loan awarded.
3. **Capital Reserve:** The Capital Reserve Fund should have the ability to cover the replacement of several major pieces of equipment in the event of unexpected failure. The amount estimated to cover major components of the system is \$265,000. It is assumed that equipment costs will increase at 10% per year. This cost would cover one pump replacement, one well replacement, emergency heat exchanger repair, and 300 linear feet of piping replacement if a failure were to occur.

5.0 PROPOSED RATE CHANGES

Two scenarios were explored as part of this rate study and are explored further below. Scenario 1 assumes that all required revenue must be generated solely from the geothermal customers. Due to the relatively small number of customers, this results in significant rate increases across all customer groups.

Scenario 2 assumes a portion of the required revenue will be generated directly from ticket sales as small percentage fee charged with each ticket sold. This scenario directs the cost towards visitors of the hot springs who value, benefit from, and enjoy the resource. The alternative revenue stream from ticket sale fees can also be labeled as the geothermal longevity fee, increasing awareness and education on the importance of maintaining and protecting this valuable resource. Public outreach and resources can also be developed for the Overlook and The Springs Resort to share with customers.

5.1 PROPOSED RATE STRUCTURE

5.1.1 SCENARIO 1

Under Scenario 1, a large rate increase is proposed for the largest users of the system in 2027 as this will have the greatest net impact on revenue generation. This will assist the Town in reaching a new baseline operating level from which smaller incremental increases can be adopted each year to help support system maintenance.

Table 4 – Scenario 1: Proposed User Fees

User	2025 (Current)	2026	2027	2028	2029
Residential Rate	\$62.42/mo	\$62.42/mo	\$68.67/mo	\$75.53/mo	\$83.09/mo
Commercial Rate					
<2000 sf	\$107.10/mo	\$107.10/mo	\$117.81/mo	\$129.59/mo	\$142.55/mo
2001-5000 sf	\$267.75/mo	\$267.75/mo	\$294.53/mo	\$323.98/mo	\$356.38/mo
5001-9000 sf	\$749.70/mo	\$749.70/mo	\$824.67/mo	\$907.14/mo	\$997.85/mo
>9000 sf	\$1,071.00/mo	\$1,071.00/mo	\$1,178.10/mo	\$1,295.91/mo	\$1,425.50/mo
The Springs Resort	\$2,084.00/mo	\$2,084.00/mo	\$14,100.00/mo	\$15,510.00/mo	\$17,061.00/mo
The Springs Resort ¹	\$0.21/Therm	\$0.21/Therm	\$1.41/Therm	\$1.56/Therm	\$1.71/Therm
The Springs Resort Mineral Fee	\$20,100/year	\$20,100/year	\$20,703/year	\$21,324/year	\$21,964/year
The Overlook	\$299.18/mo	\$299.18/mo	\$1,410.00/mo	\$1,551.00/mo	\$1,706.10/mo
The Overlook ¹	\$0.30/Therm	\$0.30/Therm	\$1.41/Therm	\$1.56/Therm	\$1.71/Therm
The Overlook Mineral Fee	\$4,680/year	\$4,680/year	\$4,820/year	\$4,965/year	\$5,114/year
Tap Fee	\$6,000	\$6,000	\$6,000	\$6,000	\$6,000

NOTES:

1. The fee per Therm was calculated based on an assumed flow of 350 GPM for The Springs Resort and 35 GPM for The Overlook and an assumed heat consumption of 327.86 Therms/day for The Springs Resort and 32.78 Therms/day for The Overlook. The purpose of this calculation is to allow for the comparison to natural gas prices.

The projected income and reserves balances for Scenario 1 are shown in **Figure 2**. Although net income is expected to dip below zero for several years, rates were set to ensure minimum reserve balances are

maintained. The total reserves balance includes the capital reserve, O&M reserve, and debt service reserve. The O&M and debt service reserves are not plotted in this figure because the balances are the same or nearly the same year to year.

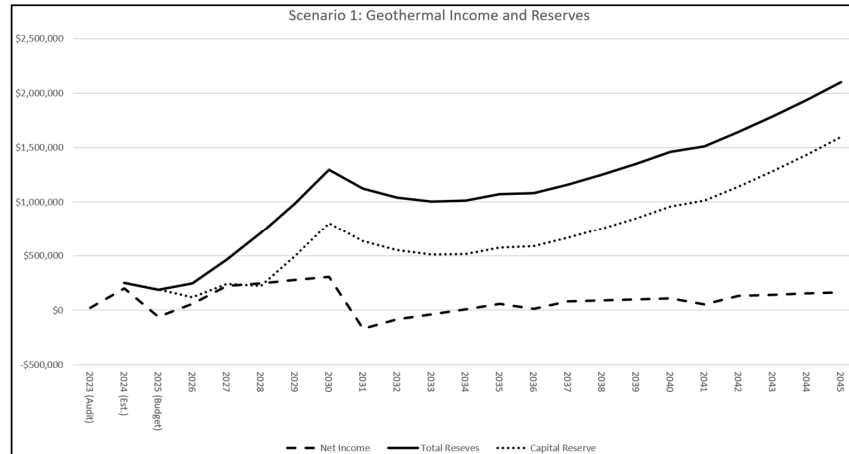


Figure 2 – Scenario 1: Geothermal Income and Reserves.

5.1.2 SCENARIO 2

As an alternative to a large rate increase for the two largest users of the system, an increased Mineral Fee is proposed. This fee would be paid directly to the Town at a rate of 2.75% of current ticket prices at the Overlook and Springs Resort. The revenue generated from this fee would employ a full-time geothermal aquifer expert to be employed by the Town to maintain, monitor, and assess the health of the Geothermal aquifer. Additionally, this fee will be used to fund the required ongoing maintenance projects for the system. As a result of the fee, the user rates are not required to increase to the levels described in Scenario 1. This helps spread the cost out of the Geothermal resource on those who utilize the benefits from the system. The proposed rates when implementing a 2.75% surcharge results in significantly lower user fees, which are summarized in **Table 5**.

Table 5 – Scenario 2: Proposed User Fees

User	2025 (Current)	2026	2027	2028	2029
Residential Rate	\$62.42/mo	\$62.42/mo	\$63.67/mo	\$64.95/mo	\$66.24/mo
Commercial Rate					
<2000 sf	\$107.10/mo	\$107.10/mo	\$109.24/mo	\$111.43/mo	\$113.66/mo
2001-5000 sf	\$267.75/mo	\$267.75/mo	\$273.11/mo	\$278.57/mo	\$284.14/mo
5001-9000 sf	\$749.70/mo	\$749.70/mo	\$764.69/mo	\$779.99/mo	\$795.59/mo
>9000 sf	\$1,071.00/mo	\$1,071.00/mo	\$1,092.42/mo	\$1,114.27/mo	\$1,136.55/mo
The Springs Resort	\$2,084.00/mo	\$2,084.00/mo	\$2,125.68/mo	\$2,168.19/mo	\$2,211.56/mo
The Springs Resort ¹	\$0.21/Therm	\$0.21/Therm	\$0.21/Therm	\$0.22/Therm	\$0.22/Therm
The Overlook	\$299.18/mo	\$299.18/mo	\$212.57/mo	\$216.82/mo	\$221.16/mo
The Overlook ¹	\$0.30/Therm	\$0.30/Therm	\$0.21/Therm	\$0.22/Therm	\$0.22/Therm
Tap Fee	\$6,000	\$6,000	\$6,000	\$6,000	\$6,000

NOTES:

1. The fee per Therm was calculated based on an assumed flow of 350 GPM for The Springs Resort and 35 GPM for The Overlook and an assumed heat consumption of 327.86 Therms/day for The Springs Resort and 32.78 Therms/day for The Overlook. The purpose of this calculation is to allow for the comparison to natural gas prices.

The projected income and reserves balance for Scenario 2 are shown in **Figure 3**. Due to the additional revenue from the Mineral Fee, the Town is expected to maintain a positive net income most years while keeping customer rates low. Net income will be negative for several years when the Town begins its loan payment for the distribution system replacement, however, minimum reserve balances will be maintained.

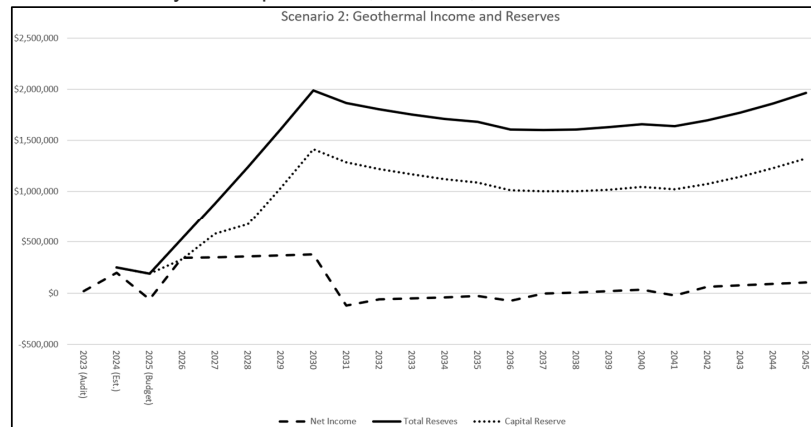


Figure 3 – Scenario 2: Geothermal Income and Reserves

Based on RFE's research into geothermal utilities in Iceland and in the US, it is common for commercial customers to pay a discounted rate for geothermal water. However, this occurs when the municipality is an owner or operator of those hot springs, electric generation is occurring, or a larger population is utilizing geothermal energy. The Pagosa Geothermal System serves a relatively small residential and commercial population, with the largest users receiving the geothermal waters to utilize for private businesses. The Town recognizes the importance of these businesses within the community but also acknowledges that due to the age of the system, value of the resources, and necessary cost to update and further maintain the system requires a more equitable rate structure. Scenario 2 offers a solution to minimize user rate increases and directly tie revenue generation to customer usage.

The Town of Pagosa Springs provides reliable energy and resource at a stable price, which is not subject to market volatility, or physical availability (e.g. non-renewable sources). However, this resource is lacking adequate funding to maintain, replace, monitor, and operate the system. Therefore, the cost necessary to maintain and protect this resource also presents a non-monetary value which cannot be replaced.

5.2 CUSTOMER CLASS RATE ADJUSTMENTS

The main objective for the Town over the next 20 years is to sustainably replace its aging equipment while providing affordable services to its customers. The Town currently utilizes a fixed usage rate for all customers.

To meet the calculated revenue requirement over the next 20 years, revenue will need to increase significantly. Typically, total revenue is approximately \$60,000 per year. Once the distribution replacement debt payments begin in 2031, the required revenue increases to around \$400,000 to \$600,000 annually. This required revenue can be met by increasing user rates or using an alternative revenue source. Scenario 1 proposes significant direct rate increases, which must be paid regardless of revenue generated at the hot springs resorts and use of the resource. Rates can be increased at one large increase in 2027 or broken

up over the next six years to meet the 2031 goal. Currently, the cash flow for Scenario 1 assumes one large increase with smaller increases in subsequent years. Please see **Table 4** for the proposed increases through 2029, after which, rates will increase by 10% through 2035. Rates will then increase at 2% through 2045.

Alternatively, the required revenue can be achieved through applying a ticket fee associated with each ticket sold at the hot springs resorts and hotel room rentals as described in Scenario 2. Please see **Table 5** for the proposed increases through 2029. Under Scenario 2, rates will increase by 2% through 2045.

The Town would like to continue charging residential users a flat monthly fee rather than returning to metered charges. The attached Cash Flow spreadsheet assumes flat monthly fees will continue with annual inflation increases. Given the relatively low geothermal usage by residential customers, revenue generated from residential users is proportionally low. Any rate adjustments will proportionally affect larger commercial users more than residential users.

5.3 MINERAL FEE

5.3.1 SCENARIO 1 MINERAL FEE

Scenario 1 proposes a Mineral Fee to help generate the required revenue for the system. As suggested in the September 19, 2024 Agenda Brief, charging both hot springs resorts a flat fee for mineral water would provide the Town with approximately \$24,780 of revenue per year. This fee is based on the number of pools and the daily soaking rate, and it is proposed to increase at 3% per year with inflation but may be adjusted further based on the non-resident daily soaking rate.

The raw geothermal water has high mineral concentrations and is typically very hard. These healing properties of the geothermal water which attract customers at the hot springs resorts, also contribute to premature aging and scaling of the distribution equipment, which requires frequent maintenance and equipment replacement. This is defined as a cost-causative factor and is explored in *Principles of Water Rates, Fees, and Charges*, as it is typical for certain customers to have a larger impact on a treatment or distribution system for any utility. These customers should be charged more to recoup the additional cost incurred by the utility provider to provide them service. Typically, these charges are calculated and assigned directly to the customer receiving the unique service. At this time, the proposed Mineral Fee presents a solution, which is a small portion of revenue (one non-resident using each pool for one day of each month) to help cover this cost. Other methods of calculating Mineral Fees could include a proportional allocation of annual operating expenditures to each customer, which would result in likely a prohibitively high fee amount for hot springs users.

5.3.2 SCENARIO 2 MINERAL FEE

A Mineral Fee is also proposed under Scenario 2. Instead of charging the hot springs resorts directly, the cost is shifted to the hot springs customers as a "turnstile" fee. Specifically, the proposed Mineral Fee is a 2.75% surcharge on all tickets sold as well as a 2.25% surcharge on hotel rooms that include hot springs access.

The Mineral Fee was incorporated into the 20-Year Cash Flow based on the following assumptions:

1. The Springs Resort sells 122,240 day passes per year at \$67 per pass.
2. The Springs Resort sells 160 local memberships per year at \$480 per membership per year.
3. The Springs Resort sells approximately 25,000 rooms per year and an average cost of \$389 per room.
4. The Overlook sells 18,250 day passes per year at \$30/ticket per pass.

This fee is expected to provide an additional \$460,000 in annual revenue. If implemented, the Town would be able to hire a full-time hydrogeologist and purchase equipment to monitor and maintain the health of the aquifer – an effort that benefits all customers. Hiring and retaining a staff hydrogeologist is estimated to cost \$150,000 per year. The remaining revenue would support the Town's maintenance needs and upcoming capital projects. **Table 6** shows the adjusted day pass and hotel room rates based on the proposed Mineral Fee, which assumes a percentage of 2.75% on all soaking passes and 2.25% on hotel rooms that include hot springs access.

Table 6 – Adjusted Prices Under Scenario 2

Resort	Current Price	Projected Price
The Springs Resort Day Pass	\$67	\$68.84
The Springs Resort Local Membership	\$480	\$493.20
Hotel Room at The Springs Resort	\$389	\$397.75
The Overlook Day Pass	\$30	\$30.83

5.4 TAP FEE ADJUSTMENTS

No plant expansion is planned at the moment and the Town is not expecting any income from tap fees in the near future. As such, the change in tap fees was not investigated as part of this study. However, should expansion become viable a change in tap fee for new users buying into a new system should be discussed. If expansion is pursued, RFE recommends reevaluating tap fees, particularly if any large user is proposing to tap into the Town's system. In general, tap fees should increase annually or periodically with inflation.

5.5 RESERVE FUND PAYMENTS

5.5.1 O&M RESERVE FUND

RFE recommends depositing funds into an O&M reserve, which should have the ability to cover 6 months of total O&M expenses. This reserve allows the town to maintain operations for 6 months should payment from customers not be collected for any purpose (natural disaster, etc.). It is assumed that only operating system, administrative, and professional fee expenditures are covered for 6 months. Capital project work would cease under this emergency scenario.

5.5.2 DEBT SERVICE RESERVE FUND

In addition to debt service payments, RFE recommends having a debt service reserve fund, which will be required for any loan agency providing money to the Town. The debt service reserve fund level is typically established as one year's principal and interest payment on all current debt service payments. Since debt service payments are not expected to fluctuate, the reserve fund should be built up now and finalized by 2031 when the Town applies for a new loan for the distribution system.

5.5.3 CAPITAL RESERVE FUND

RFE recommends that the remaining net income be added to the Capital Reserve Fund. It is beneficial to have a healthy reserve to fund large capital improvement projects, so that the Town can respond to any unforeseen construction or project costs. This fund should have the ability to cover the replacement of several major pieces of equipment. This cash flow uses approximately \$265,000 as a minimum balance, which would cover one pump replacement, emergency heat exchanger repair, and 300 LF of distribution piping replacement if a leak was discovered. This calculation assumes that equipment costs increase at 10% per year.

Advice from financial advisors and a legal team should be sought to understand if there are any limitations on creating separate reserve funds for each purpose mentioned above. For loan funds, it may be required that a separate reserve is created and is only allowed to be used for debt service payments.

5.6 ALTERNATIVE REVENUE SOURCES

Given the high revenue requirement expected over the next 20 years, the Town is exploring alternative revenue streams to help fund system maintenance. A hot spring pass surcharge was analyzed in this study, but it is possible that a sales fee could be implemented to help fund the system and fund critical aquifer health studies.

6.0 RECOMMENDATIONS AND FUTURE STUDIES

Geothermal water and energy usage is a resource which many communities are not privileged to utilize and benefit from like Pagosa Springs. The current market volatility of energy prices, and decline of natural resources, specifically groundwater aquifer health, makes the Town of Pagosa Springs' Geothermal System a valuable resource which needs to be properly maintained, protected, and sustainably operated. While historic pricing agreements have provided large discounts to users, the Town has identified that this financial model is no longer sustainable to maintain and operate the system. The cost to replace the distribution system, mechanical equipment, and wells requires significant investment from all users to keep utilizing the resource. As such, while the changes are stark to what has been historically charged, the proposed rate structures set a new trajectory for ensuring that the system can be sustainably operated for the next 20 years and beyond. The lack of maintenance and funds to improve or maintain the system could result in a loss of resource to all customers.

The required revenue needed to sustainably support upcoming major capital projects was identified and summarized in previous sections. The proposed rates for each customer class to support these requirements through 2029 can be found in **Table 4** and **Table 5** for Scenarios 1 and 2. The proposed user rates for both scenarios are summarized in the attached 20-Year Cash Flow, which gives a detailed look at the necessary revenue needed to update and maintain the aging geothermal system. Under Scenario 1, significant increases are proposed in 2027 which will be crucial to funding the necessary system upgrades and several recommended and required reserve funds. Scenario 2 relies heavily on the Mineral fee as an alternative source of revenue. Several assumptions were made regarding number of ticket sales, hotel room sales, types of tickets, and ticket prices. These assumptions should be reviewed, and the 20-Year Cash Flow and user rates should be reevaluated to account for any change. Additional sources of revenue should be further investigated. It is recommended that the Town adopt either of the proposed rate structures for the next five years, with the ability to maintain or increase at a lower percentage should assumptions change from this study.

Scenario 2 will be further discussed and investigated between Town staff and all stakeholders. Should the decision to move with Scenario be agreed upon by all stakeholders, that rate structure will be adopted for 2027 and forward. If not, Scenario 1 rates will be adopted on an annual basis.

APPENDIX A

20-Year Cash Flows

5-yr Cash Flow Summary Table - Scenario 1																									
9/12/2025																									
Assumptions: See report for detailed assumptions																									
Monthly User Fees																									
Fee Increase (31 Total)																									
Residential Monthly Rate Per Tap			\$61.20	\$61.20	\$62.42	\$62.42	\$68.67	\$75.53	\$83.09	\$91.39	\$100.53	\$110.59	\$121.65	\$133.81	\$147.19	\$150.14	\$153.14	\$156.20	\$159.33	\$162.51	\$165.76	\$169.08	\$172.46	\$175.91	\$179.43
Commercial Monthly Rate (<2,000 sf)			\$105.00	\$105.00	\$107.10	\$107.10	\$117.81	\$129.59	\$142.55	\$156.81	\$172.49	\$189.73	\$208.71	\$229.58	\$252.54	\$257.59	\$262.74	\$267.99	\$273.35	\$278.82	\$284.40	\$290.08	\$295.89	\$301.80	\$307.84
Commercial Monthly Rate (2,001-5,000 sf)			\$262.50	\$262.50	\$267.75	\$267.75	\$294.53	\$323.98	\$356.38	\$392.01	\$431.21	\$474.34	\$521.77	\$573.95	\$631.34	\$643.97	\$666.85	\$669.98	\$683.38	\$697.05	\$710.99	\$725.21	\$739.72	\$754.51	\$769.60
Commercial Monthly Rate (5,001-9,000 sf)			\$735.00	\$735.00	\$749.70	\$749.70	\$824.67	\$907.14	\$997.85	\$1,097.64	\$1,207.40	\$1,328.14	\$1,460.95	\$1,607.05	\$1,767.75	\$1,803.11	\$1,839.17	\$1,875.95	\$1,913.47	\$1,951.74	\$1,990.78	\$2,030.59	\$2,071.20	\$2,112.63	\$2,154.88
Commercial Monthly Rate (>9,000 sf)			\$1,050.00	\$1,050.00	\$1,071.00	\$1,071.00	\$1,178.10	\$1,295.91	\$1,425.50	\$1,568.05	\$1,724.86	\$1,897.34	\$2,087.08	\$2,295.78	\$2,525.36	\$2,575.87	\$2,627.39	\$2,679.93	\$2,733.53	\$2,788.20	\$2,843.97	\$2,900.85	\$2,958.86	\$3,018.04	\$3,078.40
Fee Increase																									
Raw Geothermal Water Monthly Rate (The Springs Resort)			\$0.10	\$2,084.00	\$2,084.00	\$14,100.00	\$15,510.00	\$17,061.00	\$18,767.10	\$20,643.81	\$22,708.19	\$24,979.01	\$27,476.91	\$30,224.60	\$30,829.09	\$31,445.68	\$32,074.59	\$32,716.08	\$33,370.40	\$34,037.81	\$34,718.57	\$35,412.94	\$36,121.20	\$36,843.62	
Raw Geothermal Water Rate per Therm (The Springs Resort)			\$0.10	\$0.21	\$0.21	\$1.41	\$1.56	\$1.71	\$1.88	\$2.07	\$2.28	\$2.50	\$2.76	\$3.03	\$3.09	\$3.15	\$3.22	\$3.28	\$3.35	\$3.41	\$3.48	\$3.55	\$3.62	\$3.69	
Raw Geothermal Water Monthly Rate (The Overlook)			\$0.10	\$299.18	\$299.18	\$1,410.00	\$1,551.00	\$1,706.10	\$1,876.71	\$2,064.38	\$2,270.82	\$2,497.90	\$2,747.69	\$3,022.46	\$3,082.91	\$3,144.57	\$3,207.46	\$3,271.61	\$3,337.04	\$3,403.78	\$3,471.86	\$3,541.29	\$3,612.12	\$3,684.36	
Raw Geothermal Water Rate per Therm (The Overlook)			\$0.10	\$0.30	\$0.30	\$1.41	\$1.56	\$1.71	\$1.88	\$2.07	\$2.28	\$2.50	\$2.76	\$3.03	\$3.09	\$3.15	\$3.22	\$3.28	\$3.35	\$3.41	\$3.48	\$3.55	\$3.62	\$3.69	
Tap Fee					\$6,000	\$6,000	\$6,000	\$6,000	\$6,000	\$6,000	\$6,000	\$6,000	\$6,000	\$6,000	\$6,000	\$6,000	\$6,000	\$6,000	\$6,000	\$6,000	\$6,000	\$6,000	\$6,000	\$6,000	
Proposed Cash Flow			2023 (Audit)	2024 (Est.)	2025 (Budget)	2026	2027	2028	2029	2030	2031	2032	2033	2034	2035	2036	2037	2038	2039	2040	2041	2042	2043	2044	2045
Operating Revenues:																									
Charges for Services (Residential, Commercial, School, Sidewalk)			\$61,485	\$63,197	\$82,205	\$82,205	\$90,426	\$99,468	\$109,415	\$120,357	\$132,392	\$145,632	\$160,195	\$176,214	\$193,836	\$197,712	\$201,667	\$205,700	\$209,814	\$214,010	\$218,291	\$222,656	\$227,109	\$231,652	\$236,285
Raw Water To The Springs Resort					\$25,008	\$25,008	\$169,200	\$186,120	\$204,732	\$225,205	\$247,726	\$272,498	\$299,748	\$329,723	\$362,695	\$369,949	\$377,348	\$384,895	\$392,593	\$400,445	\$408,454	\$416,623	\$424,955	\$433,454	\$442,123
Mineral Water Fee (The Springs Resort)					\$20,100	\$20,100	\$20,703	\$21,324	\$21,964	\$22,623	\$23,301	\$24,000	\$24,720	\$25,462	\$26,226	\$27,013	\$27,823	\$28,658	\$29,518	\$30,403	\$31,315	\$32,255	\$33,222	\$34,219	\$35,245
Raw Water To The Overlook					\$3,590	\$3,590	\$16,920	\$18,612	\$20,473	\$22,521	\$24,773	\$27,250	\$29,975	\$32,972	\$36,270	\$36,995	\$37,735	\$38,490	\$39,259	\$40,044	\$40,845	\$41,662	\$42,496	\$43,345	\$44,212
Mineral Water Fees (The Overlook)					\$4,680	\$4,680	\$4,820	\$4,965	\$5,114	\$5,267	\$5,425	\$5,588	\$5,756	\$5,928	\$6,106	\$6,290	\$6,478	\$6,673	\$6,873	\$7,079	\$7,291	\$7,510	\$7,735	\$7,967	\$8,206
Rumbaugh Well Lease					\$1,197	\$1,197	\$1,197	\$1,197	\$1,197	\$1,197	\$1,197	\$1,197	\$1,197	\$1,197	\$1,197	\$1,197	\$1,197	\$1,197	\$1,197	\$1,197	\$1,197	\$1,197	\$1,198	\$1,199	\$1,200
Miscellaneous Revenues			\$0	\$44,052		\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Total Op. Revenue			\$61,485	\$107,249	\$136,780	\$136,780	\$303,266	\$331,686	\$362,895	\$397,169	\$434,814	\$476,165	\$521,591	\$571,497	\$626,329	\$639,155	\$652,248	\$665,612	\$679,253	\$693,178	\$707,393	\$721,903	\$736,715	\$751,836	\$767,272
External Funding																									
Transfer from General Fund					-	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	
Federal/State Grants			\$140,390	\$140,390	\$140,390	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	
Total External Assistance			\$0	\$140,390	\$140,390	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	
Total Revenues			\$61,485	\$247,639	\$252,390	\$136,780	\$303,266	\$331,686	\$362,895	\$397,169	\$434,814	\$476,165	\$521,591	\$571,497	\$626,329	\$639,155	\$652,248	\$665,612	\$679,253	\$693,178	\$707,393	\$721,903	\$736,715	\$751,836	\$767,272
Operating Expenditures:																									
Operating System			\$37,249	\$42,828	-	\$45,436	\$46,800	\$48,204	\$49,650	\$51,139	\$52,673	\$54,253	\$55,881	\$57,558	\$59,284	\$61,063	\$62,895	\$64,782	\$66,725	\$68,727	\$70,788	\$72,912	\$75,100	\$77,353	\$79,673
Administrative			\$1,000	\$1,150	-	\$1,220	\$1,256	\$1,294	\$1,333	\$1,373	\$1,414	\$1,457	\$1,500	\$1,545	\$1,592	\$1,639	\$1,688	\$1,739	\$1,791	\$1,845	\$1,900	\$1,957	\$2,016	\$2,077	\$2,139
Professional Fees			\$2,911	\$3,347	-	\$3,551	\$3,657	\$3,767	\$3,880	\$3,997	\$4,116	\$4,240	\$4,367	\$4,498	\$4,633	\$4,772	\$4,915	\$5,063	\$5,215	\$5,371	\$5,532	\$5,698	\$5,869	\$6,045	\$6,226
Total Operating Ex.			\$41,160	\$47,325	\$33,301	\$50,207	\$51,713	\$53,265	\$54,863	\$56,509	\$58,204	\$59,950	\$61,748	\$63,601	\$65,509	\$67,474	\$69,498	\$71,583	\$73,731	\$75,943	\$78,221	\$80,568	\$82,985	\$85,474	\$88,038
Capital Debt Service:																									
Existing Debt Service			\$72	-	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	
Distribution System Replacement Loan - 3.85%				-	\$0	\$0	\$0	\$0	\$0	\$0	\$462,148	\$462,148	\$462,148	\$462,148	\$462,148	\$462,148	\$462,148	\$462,148	\$462,148	\$462,148	\$462,148	\$462,148	\$462,148	\$462,148	
Total Capital Ex.			\$72	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$462,148	\$462,148	\$462,148	\$462,148	\$462,148	\$462,148	\$462,148	\$462,148	\$462,148	\$462,148	\$462,148	\$462,148	\$462,148	\$462,148	
Capital Expenditures																									
Well Maintenance and Replacement			\$0	-	\$0	\$0	\$0	\$0	\$0	\$50,000	\$0	\$0	\$0	\$57,964			\$0	\$0	\$0	\$0	\$67,196	\$0	\$0	\$0	
Capital and Maintenance Projects			\$0	\$280,780	\$30,000	\$30,900	\$31,827	\$32,782	\$33,765	\$34,778	\$35,822	\$36,896	\$38,003	\$39,143	\$40,317	\$41,527	\$42,773	\$44,056	\$45,378	\$46,739	\$48,141	\$49,585	\$51,073	\$52,605	
Total Capital Ex.			\$0	\$0	\$280,780	\$30,000	\$30,900	\$31,827	\$32,782	\$33,765	\$84,778	\$35,822	\$36,896	\$38,003	\$39,143	\$98,281	\$41,527	\$42,773	\$44,056	\$45,378	\$113,935	\$48,141	\$49,585	\$51,073	\$52,605
Total Expenditures			\$41,232	\$47,325	\$314,081	\$80,207	\$82,613	\$85,092	\$87,644	\$90,274	\$605,130	\$557,919	\$560,792	\$563,752	\$566,800	\$627,903	\$573,173	\$576,504	\$579,934	\$583,468	\$654,303	\$590,856	\$594,718	\$598,695	\$602,791
Net Income			\$20,253	\$200,314	-\$61,691	\$56,573	\$220,653	\$246,594	\$275,250	\$306,895	-\$170,315	-\$81,754	-\$39,201	\$7,745	\$59,530	\$11,253	\$79,075	\$89,108	\$99,319	\$109,710	\$53,089	\$131,046	\$141,998	\$153,142	\$164,481
Operating Reserve			\$0	\$0	\$25,104	\$25,857	\$26,632	\$27,431	\$28,254	\$29,102	\$29,975	\$30,874	\$31,800	\$32,754	\$33,737	\$34,749	\$35,792	\$36,865	\$37,971	\$39,111	\$40,284	\$41,492	\$42,737	\$44,019	
Debt Service Reserve			\$0	\$0	\$100,000	\$200,000	\$462,148	\$462,148	\$462,148	\$462,148	\$462,148	\$462,148	\$462,148	\$462,148	\$462,148	\$462,148	\$462,148	\$462,148	\$462,148	\$462,148	\$462,148	\$462,148	\$462,148	\$462,148	
Capital Reserve			\$250,409	\$188,718	\$120,187	\$240,087	\$223,758	\$498,210	\$804,282	\$633,119	\$550,492	\$510,391	\$517,210	\$575,786	\$586,056	\$664,119	\$752,184	\$850,429	\$959,033	\$1,010,984	\$1,140,857	\$1,281,646	\$1,433,543	\$1,596,741	
Total Reserves			\$250,409	\$188,718	\$245,291	\$465,944	\$712,538	\$987,789	\$1,294,684	\$1,011,158	\$1,003,413	\$1,011,158	\$1,070,688	\$1,081,941	\$1,161,015	\$1,250,123	\$1,349,442	\$1,459,152	\$1,578,288	\$1,693,427	\$1,785,286	\$1,858,427	\$1,922,100	\$1,985,900	

NEW BUSINESS IX.1.

APPENDIX B

Plummer – Pagosa Geothermal Assessment

TECHNICAL MEMORANDUM

Geothermal System Assessment

**Town of Pagosa Springs
Pagosa Springs, Colorado**

Prepared For	Pagosa Springs Sanitation General Improvements District
Prepared By	Steve Omer, P.E.
DATE	June 30, 2020
VERSION	1
PROJECT NO.	4092-008-01



PLUMMER

Technical Memorandum
Geothermal System Assessment



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Technical Memorandum
Geothermal System Assessment



1 INTRODUCTION

The Town of Pagosa Springs (Town) has been operating a geothermal heat distribution utility since 1981. The system uses a heat exchanger and closed loop distribution system to convey heat to nearby businesses and residences. Since the original installation, only general maintenance and the addition of flow meters has been completed and there has been no expansion of the service area. The existing equipment continues to perform as designed and provide an economical heat source to utility customers.

This technical memorandum (TM) provides a summarized review of the system completed by Plummer on behalf of the Town. The review includes an assessment of existing conditions of the major infrastructure, the existing demands and capacity for system expansion, and potential new ways to expand both the heat distribution utility and the geothermal resource for uses other than heat delivery; each section includes recommended improvements. Manufacturer quotes and capital planning level cost estimates are included in the appendices for each recommended improvement, maintenance item, or major expansion opportunity.

Technical Memorandum
Geothermal System Assessment



2 EXISTING CONDITIONS

The existing geothermal wells, heat exchanger, and distribution piping network have been in service since 1981. Minimal changes have been to the system since the original development was completed. The original piping at the well heads and within the geothermal building is steel, the distribution piping is Transite, and some of the pipe connections at the heat exchanger building have been replaced with HDPE. The following sections discuss each major component of the system.

2.1 GEOTHERMAL WELLS

The Town owns three geothermal wells, two of which are in active use. They are locally designated as the Rumbaugh Well, Well 3 and Well 5. Production from the Rumbaugh Well is not directly used by the Town but is leased to the Overlook Hot Springs. Well 3 has not been in operation in recent years and Well 5 is currently used to supply geothermal water to the heat exchanger.

Wells 3 and 5 share a single water right that is limited to 450 gallons per minute (gpm); the Town is able to consistently draw the full water right through Well 5, and Well 3 has not been operated in recent years. The Rumbaugh Well has a seasonably variable water right of 150 gpm during the heating season and 35 gpm during the non-heating season; 35 gpm is currently leased to the Overlook Hot Springs on an annual basis. Figure 1 shows the current condition of Well 5; the coating appears to be in good condition with some scale showing due to discharges from the air relief valve (this scale is not harming the coating or impacting the coatings rust preventive ability for the metal piping).

Technical Memorandum
Geothermal System Assessment



Figure 1. Well 5

2.2 HEAT EXCHANGER AND GEOTHERMAL BUILDING

Water from the geothermal supply well enters the geothermal building and passes through a plate and frame heat exchanger unit that transfers heat into the water in the distribution loop. The distribution loop water is supplied by a connection to the Pagosa Area Water and Sanitation District (PAWSD) potable water supply. Geothermal water leaving the heat exchanger is used by the nearby greenhouse project and then transferred to the Springs Resort for use in their geothermal pool and hot tubs. However, the geothermal water may also be discharged into the San Juan River if the Springs Resort lease should ever terminate. Flow from the well through the heat exchanger is artesian (there is no pump used to convey the geothermal water). The heat distribution system operates as a closed loop and a pump in the geothermal building moves water through the heat exchanger and distribution piping.

The piping and equipment in the geothermal building is in good repair. The temperature sensors were replaced in 2019 and the pipe coating is in good condition overall. Figure 2 (below) shows the heat exchanger and connecting piping. The yellow piping is the hot geothermal water from the well, the red piping is the geothermal water leaving the heat exchanger, orange piping is heated water for distribution,

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and green piping is the return from the distribution loop.

The plate and frame heat exchanger is a Tranter Supercharger Model with 326 plates that provide a total exchange surface area of 2650.5 square feet. This unit is relatively small within the Tranter product line, with similar units being able to provide up to 22,000 square feet of surface area. Operators occasionally tighten the heat exchanger plate pack to control leakage. The heat exchanger has a plate pack length tolerance range of 51.64 to 54.88 inches, and the current plate pack measurement is 51.81 inches. As the gaskets reach maximum compression, the torque required to tighten and seal the exchanger begins to rise exponentially.



Figure 2. Heat Exchanger

Table 1 summarizes the results of heat exchanger performance modeling completed by Tranter (Appendix A). Geothermal water enters the exchanger at 140 degrees F; all other temperatures at the exchanger are dependent on system performance and user demands. The Existing Conditions model scenario represents recent system performance, while the Max Distribution scenario shows the maximum performance that could be achieved with the existing system. The Theoretical Condition evaluates performance potentials that could be achieved with additional water rights; this condition is only presented as an example and increasing water rights is not a recommendation of this study.

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Table 1. Modeled Heat Exchanger Performance

Description	Geothermal Flow Rate	Distribution Flow Rate	Heat Exchanged (kBtu/day)
Existing Conditions	450	375	131, 077
Max Distribution	450	700	158,908
Theoretical Condition ¹	700	700	225,311

1) This Theoretical Condition would require additional water rights

2.3 DISTRIBUTION SYSTEM

The distribution system delivers heated water to customer taps through two loops of buried pipe and occasional air release and flow control valves. One loop serves customers to the North of Hwy 160 along the Highway and Lewis Street, while the second loop serves customers along Durango, San Juan, and 8th Streets. There are several air release valve vaults to help release accumulated air from the system. At the far end of each loop of the distribution system, there is a flow control valve that provides some restriction where the system transitions from the feed to the return piping. The distribution system consists of approximately 1,480 feet of 6-inch, 14,304 feet of 8-inch, and 2,313 feet of 10-inch piping; there is a total of 18,100 feet or 3.4 miles of pipe in the system. A map of the system is provided in Appendix B.

At the time of original construction, Transite was a preferred piping material due to its relatively low weight and low friction loss. Transite is an asbestos-reinforced concrete material and due to modern regulations on asbestos exposure, it is no longer a desirable material. Potable water systems are actively abandoning Transite piping and there are federal regulations that apply to working with and disposing of Transite.

Limited sections of buried piping, where the distribution pipes enter the geothermal building, have previously been replaced with HDPE piping. HDPE has a maximum service temperature of 140 degrees F in pressurized applications, so further use of this material is not recommended.

The existing distribution pump can convey up to 700 gpm but is typically operated at a flow rate of 375 gpm. Staff have reported increased pipe failures when the system is operated at higher flow rates. The ability to increase flow in the distribution system may be a limitation to system expansion.

Customer connections are made with tapping saddles on the feed piping; many were installed during the original system construction and capped with a galvanized plug. The service piping varies by age of installation and materials, which currently includes galvanized steel, HDPE, and PEX. Staff have not

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reported significant issues with customer service connections.

2.4 RECOMMENDED IMPROVEMENTS

The overall geothermal system was constructed of durable materials and needs minimal preventative maintenance except for the distribution piping, which should be considered for replacement (see discussion in 2.4.3 below). However, there is an unused well head near the Town's wells that is heavily deteriorated; while it is not Town property, coordinated repair efforts may be worthwhile. The aging distribution piping represents the largest need for system improvements. The heat exchanger should also be considered for preventive maintenance as the stack length is close to the lower limit of tolerance and further tightening to control leaks will require continually increased force as the gaskets reach maximum compression.

2.4.1 Wells

The Town owned wells and the coatings appear to be in good condition. There is an unused well head adjacent to the Town's Well 5 that has a severely corroded shutoff valve. If this were to completely fail, it would have a negative impact on the geothermal resource and could impact all existing geothermal well owners. Plummer recommends a coordinated repair effort between the Town and well owner to protect the geothermal resource. Considering the poor condition of the existing valve, the repair may require a new valve hot tapped into the well casing below the existing valve. Also, any metal piping or valves that remain exposed should be coated in a 2-part epoxy paint system, such as Tnemec 1095, to prevent future corrosion.



Figure 3. Corroded Well Head

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2.4.2 Heat Exchanger

While the heat exchanger continues to perform per its original design; it has never had gasket replacement, and the plate stack is nearing the minimum tolerance. Communications with the heat exchanger manufacturer have identified a recommended maintenance protocol. Due to the age of the unit, and the relatively compressed stack length, Tranter recommends a factory cleaning and inspection of the entire plate stack. Factory representatives are available to disassemble the heat exchanger, service the plates and gaskets, and reassemble the unit. Alternatively, Town staff may do the local work and ship the plates to Tranter for service at their facility. Tranter provided a quote of \$35,032 (Appendix C) to perform the maintenance work and included the potential cost of a replacement plate at \$148 per plate. The plate replacement cost is simply representative as they cannot predict if, or how many, plates may need replacement due to leaks found during the factory inspection process. Plummer recommends this preventive maintenance be completed to preserve operation of this critical piece of equipment.

2.4.3 Distribution System

Newer piping materials are available that do not contain hazardous asbestos and are designed for hot service temperatures of the geothermal system. Due to the relatively large 8-inch piping, only two manufacturers were identified as capable of supplying replacement pipe; a third manufacturer of high temperature thermoplastic piping was contacted but they do not provide sizes larger than 6-inch. Both materials identified can be installed and tapped in an identical manner to HDPE. Polypropylene and Polyethylene are leading thermoplastic materials for piping, the most common variants are known as PP and HDPE; both are available in special formulations for high temperature usage.

Polypropylene Random Copolymer (PPR) piping is the high temperature version of PP piping and PE-RT (Polyethylene of Raised Temperature) is the HDPE variant that is appropriate for geothermal service. Both can be purchased pre-insulated. Table 2 presents the budgetary cost of each material as bare pipe and with 2-inches of pre-installed insulation.

Table 2. Replacement Piping Material Cost

Description	Uninsulated (\$/ft)	Insulated (\$/ft)
6" PE-RT	22.5	39
8" PE-RT	38	56
10" PE-RT	64	94
6" PPR	53	88
8" PPR	60	96

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The existing distribution system is insulated on the feed piping (going towards geothermal customers) and uninsulated on the return piping. Staff have reported the heat loss keeps the surrounding soil thawed to within a foot of the surface; while earth is a reasonable insulator, this loss is limiting the amount of heat that can be delivered to utility customers. Selection of pre-insulated piping is recommended for both feed and return piping to maximize utilization of the geothermal resource. Table 3 below presents the potential heat savings for insulated piping.

Table 3. Distribution Heat Loss

Description	Heat Loss (Btu/Hr-Ft)
8" Uninsulated PPR	145
8" Insulated PPR	22.7
Potential Heat Conservation	$145 - 22.7 = 122.3$

1) 400 feet length used correlates to the planned replacement piping in the CDOT McCabe Creek realignment project.

If the information from Table 3 is extrapolated to the whole system, the energy savings could be very significant. It becomes difficult to approximate the actual impact because of varying temperatures and velocities throughout the system. There is approximately 9,000 feet of return piping in the system and if the impact was 75 percent of that calculated above, the total heat savings is estimated to be 19,800 kBtu/day,

Due to asbestos regulations, replacement of Transite piping should not be achieved through a pipe bursting replacement method and requires specialized contractors and landfill facilities for disposal. Slip lining was also investigated as a potential repair mechanism; slip lining projects require access openings at intervals similar to sewer manholes, meaning the existing pipe would be cut at regular intervals further weakening the overall pipe system. Slip lining also has a similar installation cost to open trench pipe installation (without pavement repair costs).

The original distribution piping has been in use for almost 40 years and Transite was intended to have a 50 year service life. Plummer recommends the Transite piping be replaced with high temperature rated thermoplastic piping (PPR or PE-RT) when replacing the distribution piping. Considering the age of the Transite piping, complete distribution piping replacement should be included in capital planning; a Class IV Cost Estimate is included in Appendix D.

Insulated feed and return piping replacements are also recommended for future replacement projects.

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The upgrade to all insulated piping could enable the Town to deliver heat to more customers and increase the potential revenue from the utility.

2.4.4 Service Connections and Metering

As discussed above in Section 2.3, there are a variety of materials in use at customer service connections, including galvanized steel, HDPE, and PEX. Plummer recommends standardizing to PEX for future service connections and any required service repairs.

Most existing customers have working meters to record the therms of heat capacity consumed. In recent years, the Town decided to bill customers on past usage averages and not continue with meter readings. This billing method creates potential loss due to changes in customer demand and impacts ability to assess financial solvency of the geothermal utility. Plummer recommends meter reading be resumed (if only on a periodic basis) to track usage and develop a data set that could support a future financial assessment of the utility.

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3 SYSTEM CAPACITY

A 2007 study found a mid-winter heat transfer rate of 98,300 kBtu/Day, with metered usage of approximately 26,900 kBtu/day. This historical data can be used to compare heat transfer to metered usage indicating that roughly 75 percent of heat transferred is lost in the distribution system and not sold to customers. Some background heat loss is inherent to this type of system and reducing those losses can be achieved by replacement with insulated piping; the total reduction is a function of technology selection and feet of pipe replaced. There were 21 metered customers in 2007, 32 customers in 2013 and leases to 2 hot springs companies, and 3 new customers since that time bringing the total to 35. The heat exchanger is typically operated with the full geothermal flow of 450 gpm, with the distribution loop running at 375 gpm.

3.1 CURRENT GEOTHERMAL DEMANDS

User demands have not been actively metered since 2013. A flat rate based on 8 year averages was adopted and implemented in 2014, and meter readings and meter maintenance have been largely discontinued since that time. A model of current heat exchanger performance shows a rate of 131,100 kBtu/Day. Assuming 75 percent distribution loss, this leads to an approximation of 32,800 kBtu/day delivered to current customers.

3.2 EXISTING GEOTHERMAL CAPACITY

The system is currently operated at the full permissible water right of the geothermal well, so no further expansion is considered for that side of the system. The distribution loop is currently run at less than the maximum capacity of the existing equipment. The pump that controls flow in the loop is able to provide flow up to 700 gpm; however, it is currently operated at 375 gpm. Model results indicate that increasing the flow is calculated to increase the potential heat transfer rate up to 158,900 kBtu/day, as compared to the model estimated 131,100 kBtu/day for operation at 375 gpm; however, geothermal staff report increased pipe breaks when running the pump at higher speeds and expanding capacity by increasing the pump flow rate could lead to the need for significant pipe repair.

Another important consideration is the impact of changes to existing customers. During the 2019/2020 operating season, changes made at the Springs Resort temporarily limited flow through the heat exchanger which caused the distribution loop temperature to drop as low as 110 degrees F (the long term average is 122 degrees F). While no customers complained about service issues, one reported their

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exchange system ran longer than usual. Due to this situation, the heat exchanger modeling was completed to review the amount of energy that can be exchanged without the return temperature dropping below 110F.

3.3 REMAINING GEOTHERMAL CAPACITY

The remaining capacity of the existing system is estimated to be the difference between current amount of heat transfer, 131,100 kBtu/day and the maximum rate of 158,900 kBtu/day; the resulting available capacity is estimated to be 27,800 kBtu/day. Based on previous meter readings, the average customer uses 3,150 kBtu/day; if the data excludes the largest consumers and focuses on residential customers, the average reduces to 2,100 kBtu/day. There is potential to add up to 9 new average customers or 13 average residential customers.

If the distribution piping were replaced with insulated materials, the system loss could be significantly reduced while increasing availability of sellable energy. Section 2.4.3 shows a potential heat savings of up to 19,800 kBtu/day. This could allow an additional 6 to 10 customers to be added to the system.

3.4 POTENTIAL FOR CAPACITY EXPANSION

There are several theoretical ways to increase system capacity. These approaches include:

- 1) increases to flow rate on either the geothermal or distribution loop would increase the amount of heat transferred assuming additional demand is added.
- 2) adding demand can lead to a higher temperature difference which increases the heat transfer to a limited degree but could have a negative impact on existing customers. The following paragraphs discuss options that have been reviewed.

3.4.1 Geothermal Water Right Increase

An increase to the geothermal water right for Wells 3 and 5 was attempted in 1990 and refused by the Colorado Division of Water Resources; an increase in geothermal flow would provide additional capacity to expand the geothermal utility. The unleased portion of the Rumbaugh well right could also be run to the existing geothermal building.

3.4.2 Closed Loop Geothermal Approach

A review of reinjection well expenses indicates that a closed loop geothermal approach should be

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removed from further consideration. Injection wells can cost millions of dollars to construct and the operating expense (reinjection pump electrical cost) can be very significant. Also, this unique approach might have permitting issues with the Division of Water Resources.

3.4.3 Increased Flow Rate

The most viable way to increase capacity of the existing system is by increasing the flow rate within the distribution loop. This would increase the heat transfer potential at the exchanger while maintaining the service level expected by existing customers. This approach may require replacement or repair of the distribution system piping.

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4 EXPANSION OPPORTUNITIES

The following sections discuss several options for potential expanded usage of the geothermal system. Options considered include added traditional use for heating and snowmelt, cooling, and electrical power generation.

4.1 SUMMER COOLING OPTION

The Town has the ability (and water rights) to pump water from the river and could potentially run this through the heat exchanger during summer months. The potential to use existing infrastructure to offer cooling to existing geothermal customers was reviewed based on river temperature data collected by the USGS near the Hot Springs Boulevard bridge. During the review period of 1958 through 2013, the average river temperature between June and September was 63.4 degrees F. Thus, the minimal difference between the available source temperature and the desired temperature of most homes and businesses makes summer cooling an impractical use of the system.

4.2 INCREASED TRADITIONAL USAGE

There is remaining capacity for traditional heating and snowmelt usage. Building heat provides a more predictable impact to system loading than snowmelt, and a preference for those types of connections is recommended. Snowmelt related demands can vary greatly with weather and outdoor temperatures; whereas buildings are insulated, and interior heating provides a more predictable load for the geothermal system to support. While the ability to accommodate many new customers is currently limited by the condition of the distribution system, this remains a viable way to expand use of the geothermal utility.

The local High School was considered as a potential addition to the system. They currently have three 3-million Btu/day boilers and can run two of them simultaneously to keep up with typical winter heating demands. The geothermal system is not capable of transferring enough heat to support this load without additional water rights and other significant upgrades.

4.3 POWER GENERATION

There is a potential to generate electrical power with the latent heat in the geothermal water. Novacab has a thermal electric storage system (TESS) that is primarily marketed to help industrial users reduce peak electrical charges by storing energy during low cost periods and releasing it during the peak charge period. This technology could be used to generate electricity that the Town could then sell to the La Plata

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Electric Association (LPEA). The manufacturer estimates up to 1,634 MWh could be produced annually. LPEA uses negotiated rates for power generators which could be as low as \$0.042/kWh; this rate would lead to a potential annual revenue of \$68,600. The revenue estimate is dependent on LPEA accepting the generated electricity and paying the rate of 4.2 cents per kWh; the actual rate may be negotiated higher than the minimum presented in this report. Using this conceptual-level information, a theoretical payback period of 12 years is calculated for the equipment cost of \$805,000. Information presented in this section for the Novacab technology is based on a promotional-level proposal from Novacab is included as Appendix E.

The Novacab units would be installed down stream of utility customers during heating season with piping designed to bypass the distribution loop during summer months. Figure B (in Appendix E) presents a flow diagram of the existing system and potential piping connections for the electrical generation equipment. Novacab estimates the temperature drop across their system will be approximately 10 degrees F, so the existing system should be capable of supporting both the existing utility customers and the new load provided the geothermal flow is maintained at 450 gpm. The Novacab controller unit would best be housed inside the existing geothermal building, while the two reactor units are provided in shipping containers that can withstand outdoor installation.

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5 CONCLUSIONS

The geothermal resources and heat distribution utility owned by the Town provide a unique and cost-effective source for winter heating and snowmelt for existing customers. The system continues to perform within design intentions after nearly 40 years of seasonal service. With appropriate maintenance, the system can continue to be a reliable utility resource for the local community.

The Town's wells are in good condition; however, it may be worthwhile coordinating repair of abandoned well heads. Maintenance is recommended for the existing heat exchanger, which will restore the plate pack to a factory new condition. Replacing the gaskets and cleaning the plates will enable the heat exchange to continue operation for many years into the future.

The distribution piping is also recommended for planned replacement. The existing Transite piping is approaching the end of the intended service life, and the tendency for pipe breaks is a limiting factor for system expansion. Complete distribution replacement would be an expensive single project but would provide the most economical solution. Pipe replacement should be planned and completed either incrementally or all at once depending on funding capabilities.

Expansion of current uses to include electrical power generation has the potential to provide a dependable revenue source for the Town, while allowing for the continued traditional usage of providing heating and snowmelt to utility customers. If geothermal power generation is developed, it could help provide funding for distribution replacement and other system maintenance needs.

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APPENDIX A

Tranter Performance Modeling

H E A T E X C H A N G E R S H E A T E X C H A N G E R S

Performance Specification

Customer: Plummer
 Email:
 Cust. Reference: D-52825 New Cond
 Model: UXP-400-H-6-UR-326

Date: 5/4/2020
 Proposal No.:
 Run No.: 1198322
 Item No.:
 Technician: Malcom Cagle
 Units Required: 1

Intended End Use: Heat exchanger to cool Water 24.67 °F using 110 °F Water with pressure drop at or below 2.75 psi on hot side and at or below 2 psi on cold side.

		Hot Side		Cold Side		
Fluid Name		Water		Water		
OPERATING DATA		Inlet	Outlet	Inlet	Outlet	
Total Liquid flow	GPM	450.00	450.00	375.00	375.00	GPM
Operating Temperature	°F	140.00	115.33	110.00	139.38	°F
Pressure drop (allowed / calc.)	psi	10.00 / 2.75		10.00 / 2.00		psi
Total Heat Exchanged	Btu/h			5,461,533		
U-Service	Btu/(h·ft ² ·°F)			939		
Total Heat Transfer Area	ft ²			2,650.51		
LMTD	°F			2.20		

FLUID PROPERTIES		Inlet	Outlet	Inlet	Outlet	
Density	lb/ft ³	61.37	61.78	61.85	61.38	
Specific Heat	Btu/(lb·°F)	1.00	1.00	1.00	1.00	
Thermal Conductivity	Btu/(h·ft·°F)	0.38	0.37	0.37	0.38	
Viscosity (avg.)	cP	0.47	0.58	0.61	0.47	

CONNECTIONS

Position	M3	S3	S2	M2
Type	LJSE	LJSE	LJSE	LJSE
Size	6"	6"	6"	6"
Rating	ANSI 16.5 150#	ANSI 16.5 150#	ANSI 16.5 150#	ANSI 16.5 150#
Material	316L SS		316L SS	

CONSTRUCTION

Pass Arrangement	2(1 + 1)	2
Channel Arrangement	81H+82H	81H+0H
Plate Material (Material/Thickness)	316 SS / 0.6 mm	
Gasket Material (Hot/Cold)	NBR	NBR
No. of Plates	326	
Frame material / Paint / Color	SA-516-70 Carbon Steel / Enamel / RAL 5012 (Royal Blue)	
Tightening Bolts/Nuts/Finish	SA-193-B7 Carbon Steel / 8/2H Tie Nuts / FZB	
Pressure (design / test)	psi(g)	150.00 / 195.00
Temperature (min / design)	°F	14.00 / 250.00
Weight empty / flooded (per unit)	lbs	7,675 / 10,011
Pressure vessel code	ASME	

Remarks:

Performance (clean in unit as is) D-52825

The performance guarantee, if applicable, is based on the accuracy of the data presented above, and the customers ability to supply product and operating conditions in conformance with the above.

Tranter, Inc. P.O. Box 2289 Wichita Falls, TX 76306

H E A T E X C H A N G E R S H E A T E X C H A N G E R S

Performance Specification

Customer: Plummer
 Email:
 Cust. Reference: D-52825 New Cond
 Model: UXP-400-H-6-UR-326

Date: 5/4/2020
 Proposal No.:
 Run No.: 1198320
 Item No.:
 Technician: Malcom Cagle
 Units Required: 1

Intended End Use: Heat exchanger to cool Water 29.91 °F using 110 °F Water with pressure drop at or below 2.76 psi on hot side and at or below 6.57 psi on cold side.

		Hot Side		Cold Side		
Fluid Name		Water		Water		
OPERATING DATA		Inlet	Outlet	Inlet	Outlet	
Total Liquid flow	GPM	450.00	450.00	700.00	700.00	GPM
Operating Temperature	°F	140.00	110.09	110.00	129.08	°F
Pressure drop (allowed / calc.)	psi	10.00 / 2.76		10.00 / 6.57		psi
Total Heat Exchanged	Btu/h			6,621,154		
U-Service	Btu/(h·ft ² ·°F)			1,107		
Total Heat Transfer Area	ft ²			2,650.51		
LMTD	°F			2.26		
FLUID PROPERTIES		Inlet	Outlet	Inlet	Outlet	
Density	lb/ft ³	61.37	61.85	61.85	61.56	
Specific Heat	Btu/(lb·°F)	1.00	1.00	1.00	1.00	
Thermal Conductivity	Btu/(h·ft·°F)	0.38	0.37	0.37	0.37	
Viscosity (avg.)	cP	0.47	0.61	0.61	0.51	

CONSTRUCTION

Pass Arrangement	2(1 + 1)	2
Channel Arrangement	81H+82H	81H+0H
Plate Material (Material/Thickness)	316 SS / 0.6 mm	
Gasket Material (Hot/Cold)	NBR	NBR
No. of Plates	326	
Frame material / Paint / Color	SA-516-70 Carbon Steel / Enamel / RAL 5012 (Royal Blue)	
Tightening Bolts/Nuts/Finish	SA-193-B7 Carbon Steel / 8/2H Tie Nuts / FZB	
Pressure (design / test)	psi(g)	150.00 / 195.00
Temperature (min / design)	°F	14.00 / 250.00
Weight empty / flooded (per unit)	lbs	7,675 / 10,012
Pressure vessel code	ASME	

Remarks:

Performance (clean in unit as is) D-52825

The performance guarantee, if applicable, is based on the accuracy of the data presented above, and the customers ability to supply product and operating conditions in conformance with the above.

Tranter, Inc. P.O. Box 2289 Wichita Falls, TX 76306

H E A T E X C H A N G E R S H E A T E X C H A N G E R S

Performance Specification

Customer: Plummer
 Email:
 Cust. Reference: D-52825 New Cond
 Model: UXP-400-H-6-UR-326

Date: 4/23/2020
 Proposal No.:
 Run No.: 1197690
 Item No.:
 Technician: Malcom Cagle
 Units Required: 1

Intended End Use: Heat exchanger to cool Water 27.26 °F using 110 °F Water with pressure drop at or below 6.38 psi on hot side and at or below 6.55 psi on cold side.

		Hot Side		Cold Side		
Fluid Name		Water		Water		
OPERATING DATA		Inlet	Outlet	Inlet	Outlet	
Total Liquid flow	GPM	700.00	700.00	700.00	700.00	GPM
Operating Temperature	°F	140.00	112.74	110.00	137.05	°F
Pressure drop (allowed / calc.)	psi	10.00 / 6.38		10.00 / 6.55		psi
Total Heat Exchanged	Btu/h			9,387,959		
U-Service	Btu/(h·ft ² ·°F)			1,246		
Total Heat Transfer Area	ft ²			2,650.51		
LMTD	°F			2.84		

FLUID PROPERTIES		Inlet	Outlet	Inlet	Outlet	
Density	lb/ft ³	61.37	61.82	61.85	61.42	
Specific Heat	Btu/(lb·°F)	1.00	1.00	1.00	1.00	
Thermal Conductivity	Btu/(h·ft·°F)	0.38	0.37	0.37	0.38	
Viscosity (avg.)	cP	0.47	0.60	0.61	0.48	

CONNECTIONS

Position	M3	S3	S2	M2
Type	LJSE	LJSE	LJSE	LJSE
Size	6"	6"	6"	6"
Rating	ANSI 16.5 150#	ANSI 16.5 150#	ANSI 16.5 150#	ANSI 16.5 150#
Material	316L SS		316L SS	

CONSTRUCTION

Pass Arrangement	2(1 + 1)	2
Channel Arrangement	81H+82H	81H+0H
Plate Material (Material/Thickness)	316 SS / 0.6 mm	
Gasket Material (Hot/Cold)	NBR	NBR
No. of Plates	326	
Frame material / Paint / Color	SA-516-70 Carbon Steel / Enamel / RAL 5012 (Royal Blue)	
Tightening Bolts/Nuts/Finish	SA-193-B7 Carbon Steel / 8/2H Tie Nuts / FZB	
Pressure (design / test)	psi(g)	150.00 / 195.00
Temperature (min / design)	°F	14.00 / 250.00
Weight empty / flooded (per unit)	lbs	7,675 / 10,012
Pressure vessel code	ASME	

Remarks:

Performance (clean in unit as is) D-52825

The performance guarantee, if applicable, is based on the accuracy of the data presented above, and the customers ability to supply product and operating conditions in conformance with the above.

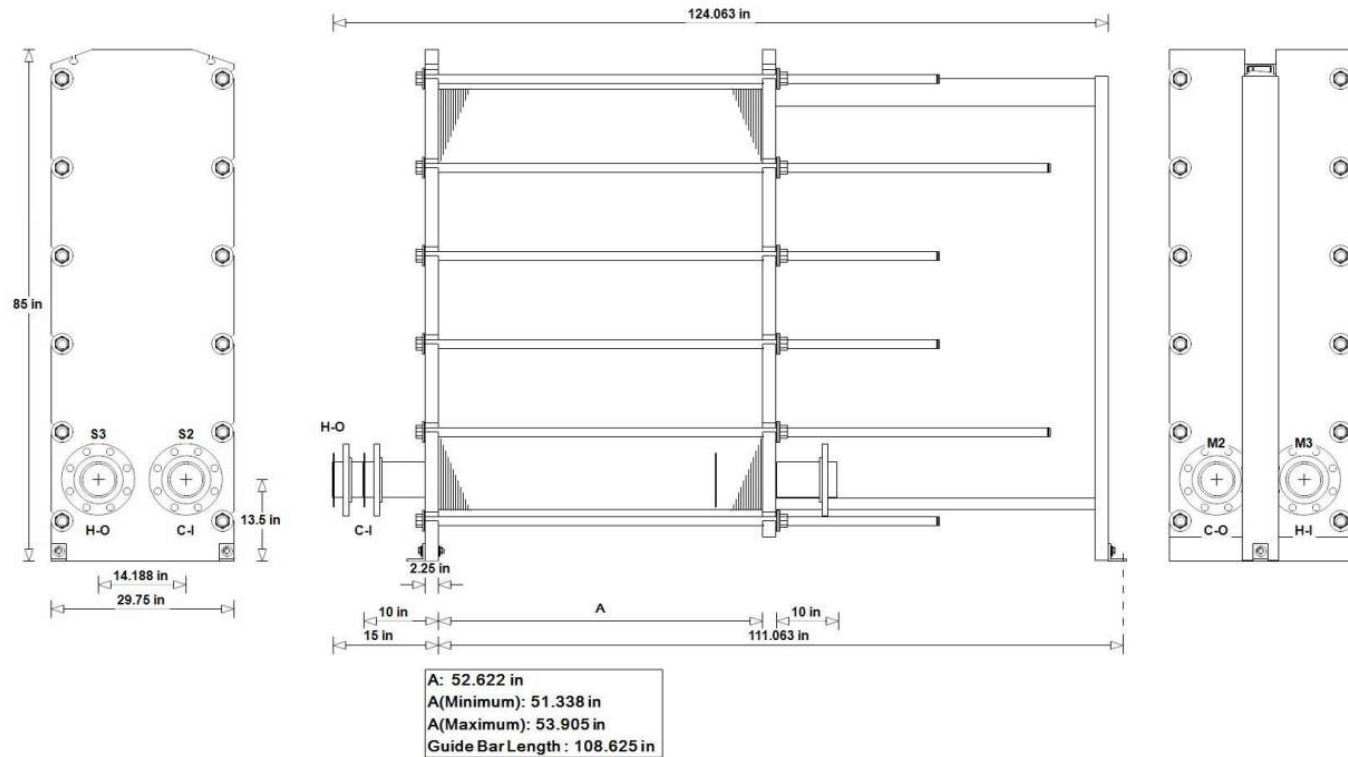
Tranter, Inc. P.O. Box 2289 Wichita Falls, TX 76306

4.23.2020

Page 63 of 83 (940) 249-9688 Fax: (940) 723-1131 Email: malcom.cagle@tranter.com

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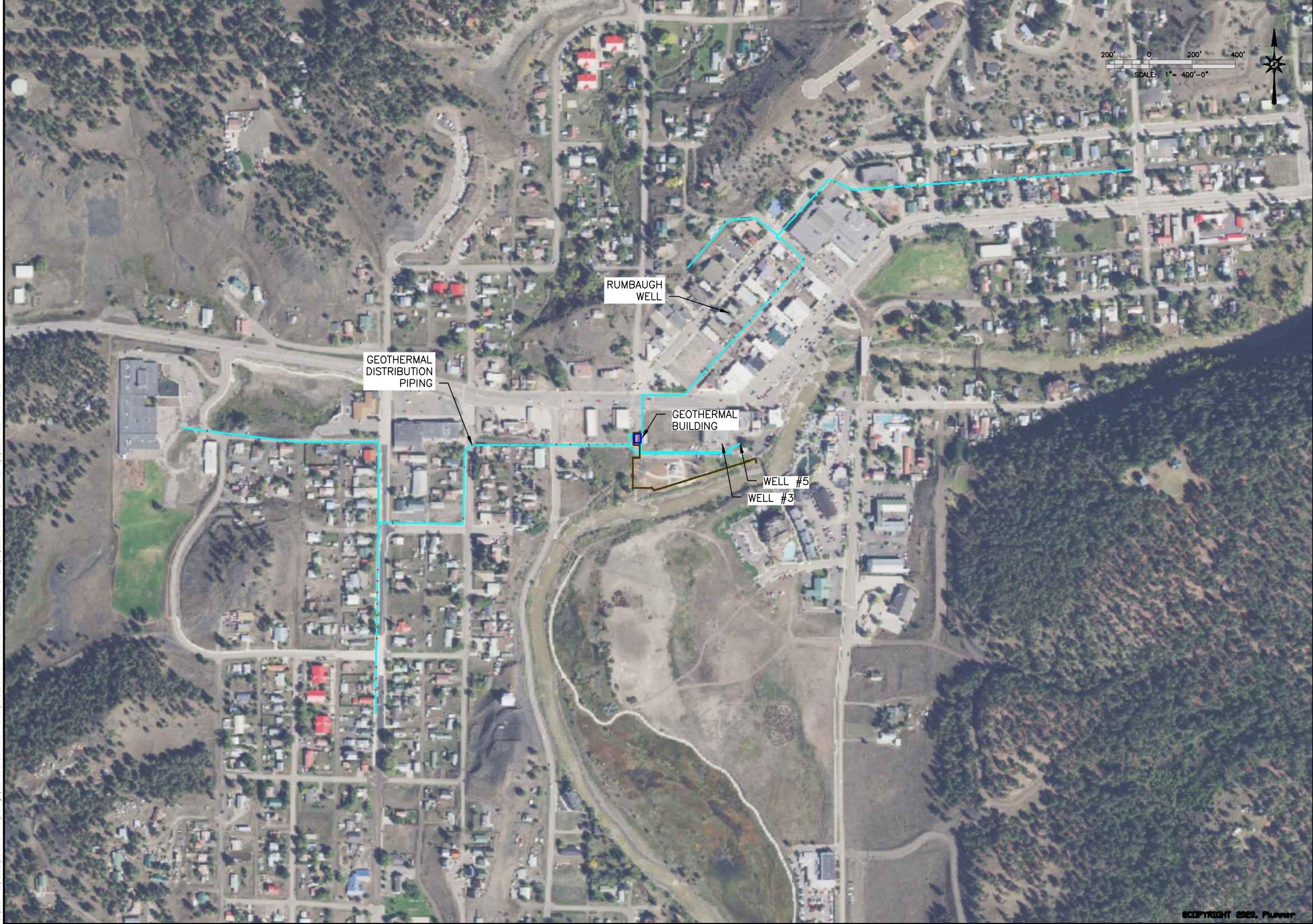
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APPENDIX B

Distribution System Map

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FIGURE No. A

PAGOSA SPRINGS GEOTHERMAL SYSTEM
EXISTING SYSTEM & CUSTOMER LOCATION MAP

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APPENDIX C

Tranter Maintenance Quote



Date: 5/13/2020

To:

Town of Pagosa Springs
PO Box 1859
551 Hot Springs Blvd
Pagosa Springs, CO 81147

Your contact is:

Sales Representative: ENERGY WEST
Name: Dennis Greaney
Email: dgreaney@energy-west.com
Phone: 303-921-5989

Quotation No.: 524976

Revision No.: 0

Inquiry Reference: UXP-400, D-52825, P-28740-H, Refurb, FS & PA

Dear Martin Schmidt:

Thank you for your valued inquiry. We are pleased to offer you Tranter Heat Exchanger Products and/or Services as itemized below:

Item	Part #/Model	Description	Unit Price	Qty	Total Price
1	Refurbishment	Clean, dye test and regasket a UXP-400 with 326 plates. (new NBR gaskets included)	\$20,892.00	1.00	\$20,892.00
2	Field Service	FS techs to remove plates from a UXP-400 with 326 plates and then go back and install plates into a UXP-400 frame once refurbishment is complete.	\$14,140.00	1.00	\$14,140.00
3	Plate Assembly	Replacement plate assembly for a UXP-400.	\$148.00	1.00	\$148.00

Total Price: \$35,180.00

Shipping Est.: 2 - 3 Weeks ARO
Payment Terms: Net 30
Currency: US Dollar
Freight: FOB Shipping Point
Quote Expiration: 7/12/2020

The above price is net at the current exchange rate and excludes all Federal, State, or Municipal taxes. Price includes Tranter Standard Packaging. All orders are subject to credit approval and acceptance by Tranter, Inc. The terms of this agreement incorporate and are subject to Tranter, Inc.'s standard terms of sale.

*Estimate is inclusive of all labor, travel, meals, lodging, and expenses for (2) service technician(s), and is based on (2) technician(s) working (2) 10-hour day(s). The rate for any additional hours necessary is \$100.00 per tech per regular hour and \$150.00 per tech per overtime hour.

Charges are estimated only. Actual charges will apply.

Service estimate is based on the work being complete under standard conditions. If circumstance beyond Tranter's control result in increased time required completing the work, additional charges will apply.

It is expected that all utilities such as water and power be provided by the customer for the purpose of disassembly, re-assembly, testing and any other necessary work required in the repair or installation of the Heat Exchanger. The

MAIN OFFICE & FACTORY
Tranter, Inc.
1900 Old Burk Hwy
Wichita Falls, Texas 76306
Phone: (940) 723-7125
Fax: (940) 723-5181

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customer is also responsible for providing necessary equipment (forklift, pallet jack, etc.) to locate all tools and parts within reasonable access to the immediate work area.

The customer is required to have the unit isolated, drained and ready for work to begin upon the arrival of the Tranter, Inc. field service technicians.

It is the customer's responsibility to remove any necessary piping from the heat exchanger.

The customer is also required to supply all manpower and tools involved in any hoisting of frames and or all piping to be removed in the disassembly and re-assembly of the Heat Exchanger. Tranter, Inc. will not be responsible for the removal or installation of the customer's piping or insulation connected to or on the Heat Exchanger.

Tranter, Inc. will provide the tools necessary to disassemble and re-assemble the Heat Exchanger. All freight charges involved in shipping these tools to and from the customer's facility (if required) will be the responsibility of the customer unless the service of the Heat Exchanger is deemed to be warranty.

It is the customer's responsibility to advise Tranter, Inc. of any onsite safety requirements, safety classes, restrictions, site access restrictions or requirements (such as "no beard/mustache" or "steel toe work shoes required"), and or documentation that must be completed before arriving onsite. Failure to do so will result in an invoicing for the serviceman's expenses if he is not allowed access to the site.

A PURCHASE ORDER AND AGREEMENT TO THE FOREGOING IS REQUIRED PRIOR TO A TRANTER, INC. FIELD SERVICE VISIT.

The cost for the cleaning and refurbishing of the plate pack include the following services / materials:

- Removal of the old gaskets
- Thorough cleaning of the plates
- 100% dye-penetrant exam of the plates
- Application of new gaskets
- Plate assemblies marked and stacked in sequential order

All freight to and from the refurbishing facility is to be paid by the customer.

Please contact Tranter West Coast at 559-686-1840 prior to shipping the plate pack to our facility at:

Tranter Inc.
West Coast Service Center
857 E. Levin
Tulare, CA 93274

In accordance with OSHA Right-To-Know regulations and EPA regulations, all returned materials that have been subject to process fluids must include an MSDS sheet of the process fluids. Failure to do so will result in refusal of the shipment.

Pricing and part availability is based on current availability of materials as of today and is subject to change due to prior sale and/or raw material based lead times.

All pricing and materials are strictly subject to material availability and prior sale.

The above quoted prices are valid for 60 days from the date of this quotation and are subject to change without notice thereafter.

We warrant our goods will be free from defects in material or workmanship under normal use and conditions, as defined by our specifications, for (1) year after shipment from our facility for all Aftermarket Parts and Labor.

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Our standard payment terms are Net 30 Days, subject to credit approval and acceptance by Tranter, Inc. Orders \$250,000 (and above) may require milestone payments. Credit cards accepted: MasterCard, Visa, and American Express.

Shipment of quoted goods is FOB Shipping Point; freight collect.

Title transfer passes to the buyer at point of shipment (collect unless otherwise specified).

Should an order result from this quote, please forward a PO to Tranter Inc. c/o **Energy West Controls**.

Feel free to contact me with any questions or concerns. And as always, we appreciate the opportunity to serve your heat exchanger needs.

Best Regards,

Christine Rails
Parts & Service Specialist
Tranter, Inc.

Jeffrey Simpson
Parts & Service Regional Sales Manager - Northwest
Tranter, Inc.
857 E. Levin Ave.
Tulare, CA 93274 United States
Jeffrey.Simpson@tranter.com
Phone: (559) 686-1840
Mobile: (559) 303-7566
Fax: (559) 686-3964

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Tranter's Terms and Conditions of Sale

Limited Warranty and Limitation of Liability

(1) This contract is between merchants for the sale of goods, for commercial use. Seller warrants its goods will be free from defects in material or workmanship under normal use and conditions, as defined by its specifications, (1) year after Seller's shipment for Supermax and Maxchanger, (2) years after Seller's shipment for Platecoil/Econocoil and Superchanger units and (3) years for Superchanger Units used in HVAC application. Buyer's entire remedy and Seller's entire liability under this warranty shall be repair or replacement by Seller, at Seller's factory or any part(s) Seller determines to be defective after inspection at its factory, or, at Seller's election, refund of the price paid for such part(s).

(2) Seller guarantees the product(s) supplied will operate and perform its (their) intended use and function in the application(s) described in the "intended end-use" and with proper maintenance for (1) year after Seller's shipment. This guarantee is based on the accuracy of the data from the customer, and the customer's ability to supply relevant product and operating conditions. Buyer agrees that Seller, at Seller's expense, shall have the opportunity to correct, cure, or remedy any performance deficiency or failure that is reasonable attributable to any defect or deficiency in workmanship, material, or design of the product(s).

(3) Except as provided below, if notified promptly in writing and given full and timely authority, information and assistance, Seller shall defend and hold Buyer harmless in any suit to the extent it claims Seller's goods infringe a United States patent existing when Seller accepted Buyer's order. If the use of such goods in enjoined, Seller may, at its choice and expense, procure for Buyer the right to continue using them, replace them with non-infringing goods, modify them so they become non-infringing, or remove them and refund their purchase price. The foregoing states Seller's entire liability for patent infringement.

(4) The above warranties are made in lieu of all other warranties, express or implied, including but not limited to implied warranties of merchantability, fitness for a particular purpose, or title or non-infringement. There are no other warranties concerning seller's goods or services. No change or addition shall be valid unless in writing signed by an authorized agent of Seller.

(5) In no event shall Seller be liable for any consequential, indirect, special or punitive damages (including but not limited to lost profits or additional expense), even if Seller knows of the possibility of such damages.

(6) The seller's maximum liability shall not exceed 25% of the amount paid by the Buyer for the goods and / or services in dispute.

(7) Buyer shall have no cause of action for breach of this agreement or relating to the goods or services hereunder after two (2) years from Seller's date of shipment or provision of services.

Acceptance and Returns

(8) Seller's acceptance of orders is expressly conditioned on Buyer's consent to these terms and conditions, and any other terms in Seller's quotation. Changes may not be implied from Seller's acts. Any terms of Buyer's order which are inconsistent with these terms shall not be binding on Seller. Unless Buyer objects in writing to specific terms within (21) days from the date of Tranter's issuance of Tranter's Terms and Conditions of Sales, Buyer shall have deemed to have accepted them.

(9) The goods shall be deemed conforming and accepted unless Seller receives written objection within three (3) months of delivery. Any acceptance test shall be at Buyer's expense and must be made when the equipment is new, clean and undamaged, before it has been placed in service, and within three (3) months after delivery. Buyer shall furnish Seller of a report of any such test, at Buyer's expense, detailing the test procedure and disclosing all results.

(10) Returns may be made only with prior Seller approval and by prepaid freight. Credit allowances for merchandise returned or repaired without prior written authorization shall be entirely at Seller's discretion.

Shipping: Risks of Loss: Delay: Changes or Cancellations

(11) All sales (domestic or international shipments) are made EXW Seller's factory, and risk of loss and risks of further handling shall pass to Buyer when Seller makes the goods available to Buyer for shipment. Freight and handling quotations are based on rates then in effect, and are subject to change if the rate changes or Buyer specifies a route. If Buyer chooses to use Tranter's freight service, Buyer forfeits the right to inspect the freight bill issued between the freight carrier and Tranter.

(12) Seller will not be liable for delays in manufacture or shipment due to causes beyond its control, including without limitation delays caused by acts of God, threat of terrorism or war, civil unrest, fire, failures or delays in its usual courses of supply of material or other conditions. If products shortages should occur, Seller reserves the right to allocate its production among its customers on such basis as Seller may determine in its sole discretion.

(13) If Buyer wishes to change or cancel its order, such request must be specified in writing; will not be binding unless expressly accepted in writing by Seller; and will be subject to reasonable charges for costs incurred and work performed before the date Seller accepts it, including but not limited to drawings, material procurement, calculations, manufacturing labor and overhead, inspections and certifications

(14) Tranter, Inc.'s acceptance of this order is predicated on Tranter, Inc.'s understanding that the goods/services provided to buyer/customer by Tranter, Inc. under this order will be used in the United States and that they are not for export. If this is not correct, Tranter, Inc. requests that the buyer/customer advise Tranter, Inc. to ensure that any exportation of the goods/services provided to customer/buyer under this order is in compliance with U.S. export control regulations.

Payment

(15) Each shipment is an independent transaction for which payment is required. Seller reserves the right to vary terms of payment or require payment before manufacturing or shipment if, in Seller's judgment, Buyer's financial conditions so requires. If Buyer requests or causes a delay, payment shall be due on the sooner of the date the goods are ready for shipment or when Seller would have been prepared to ship but for delays Buyer causes or requests.

(16) All present or future taxes or duties applicable to the goods or services or their manufacture, use, or sale shall be added to the purchase price and are the Buyer's sole responsibility. If any taxing authority later determines taxes or duties are due, Seller may bill and collect the same from Buyer without limitation as to time.

(17) Seller may increase the selling price of goods not yet shipped, upon thirty (30) days' advance written notice. Unless Buyer notifies Seller in writing during this period that it does not consent, the increased price shall be paid on all goods shipped after this period. If Buyer does not consent, Seller may terminate this agreement as to portions as yet unperformed.

(18) Payment is in USA currency. Timely payment is of the essence. Except as otherwise agreed by Seller in writing, non-payment of the invoiced amount shall constitute a breach of this agreement thirty (30) days after the date of invoice. Seller retains a purchase money security interest in the goods until paid in full. Notwithstanding anything written or oral to the contrary, under no circumstances will Seller contract for or charge interest on unpaid amounts in excess of the maximum lawful amount, and anything with may be so constructed shall be deemed reformed to provide for no more than the maximum lawful amount.

(19) Payments made with a credit card are subject to a 3% convenience fee.

Governing Law, Venue, and Arbitration

(20) All agreements and proceedings relating to the Seller's goods or services shall be governed under the laws of the State of Texas and the USA, excluding conflicts of laws, provisions or disputes regarding goods or services. Applicability of the UN Convention on International Sale of Goods is disclaimed to the full extent permitted by law.

(21) This Agreement is made and performable in Wichita Falls, Texas. Any action relating directly or indirectly to the Seller's goods or services shall be brought only in the state court located in Wichita Falls, Texas, and the parties agree to such jurisdiction; provided, however, if the goods or services to which the dispute relates were or were intended to be shipped outside the USA, such dispute shall be resolved by binding arbitration in Dallas, Texas under the then-current rules of the American Arbitration Association, and judgment on the award may be entered in any court of competent jurisdiction. The arbitrator(s) shall have not power to award relief prohibited under this Agreement. Reasonable discovery shall be permitted according to the Federal Rules of Civil Procedure.

Additional Terms Applicable to Buyer-Supplied, Designed, - or -Specified Goods.

(22) Seller warrants that its goods will be manufactured according to such designs, specifications or instructions as Buyer may make in writing, but SELLER MAKES NO OTHER WARRANTY WITH RESPECT TO EQUIPMENT MANUFACTURED PURSUANT TO BUYER'S DESIGNS, SPECIFICATIONS, INSTRUCTIONS AND/OR MATERIALS, OR THOSE OF BUYER-DESIGNATED SUPPLIER. BUYER AGREES THAT SELLER ASSUMES NO LIABILITY FOR, AND MAKES NO WARRANTY WITH RESPECT TO, THE PERFORMANCE OF QUALITY, MERCHANTABILITY, FITNESS FOR PARTICULAR PURPOSE, TITLE, OR NON-INFRINGEMENT OF SUCH EQUIPMENT.

(23) Buyer represents and warrants to Seller that any designs, specifications or instructions Buyer provides will be complete, accurate, non-infringing, and fit for the Buyer's purposes. Buyer will hold harmless, indemnify and defend Seller from any costs or expenses, including without limitation reasonable attorney's fees, arising from breach or threatened breach of this warranty or the use of Buyer-supplied or Buyer-designated materials.

Technical Memorandum
Geothermal System Assessment



APPENDIX D

Distribution Replacement Material and Cost Estimate

HDPE: High-Density Polyethylene

What is HDPE?

High-density polyethylene (HDPE) pipe is an exceptional piping product with a lengthy list of benefits. HDPE has been in use for more than 50 years, building decade after decade of proven performance. It is a ductile, durable, virtually inert thermoplastic that is highly resistant to cyclical fatigue and well suited for a broad range of demanding applications. As the largest HDPE supplier in North America, ISCO Industries can provide piping solutions anywhere in the U.S. and across the globe.



Performance Characteristics

- Temp range of -40°F to 140°F
- Burst strength of 4X the operating pressure
- Hydraulically efficient (C-Factor 150)
- Non-toxic and non-tasting for AWWA/NSF
- Leak Free

Physical Characteristics

- Lightweight
- Flexible
- UV protected (2% Carbon Black)
- Fatigue and surge tolerant
- Corrosion/Abrasion/Chemical resistant (pH 1.5 to 14)



PE-RT: Polyethylene of Raised Temperature



What is PE-RT?

Polyethylene of Raised Temperature (PE-RT) pipe is a piping product that can handle temperature and pressure ranges greater than standard HDPE. With a 50 year design life, PE-RT has the same fusion parameters as standard PE4710 pipes and is pressure rated to 180 F with no reduction in design life. This fusible monolithic piping system guarantees zero leakage and is compatible with any other piping system.



Physical Characteristics

- Lightweight
- Flexible
- UV protected (2% Carbon Black)
- Corrosion/Abrasion/Chemical resistant
- Fatigue and surge tolerant
- Impact durability/seismic flexibility
- Leak Free
- CC3 Chlorine Resistance Rating

Performance Characteristics

- Burst strength of 4X the operating pressure
- Hydraulically efficient (C-Factor 150)
- Non-toxic and non-tasting for AWWA/NSF C906 approval
- > 20 times stress crack resistance





PlatinumStripe® 1800 Series PE-RT Polyethylene Raised Temperature Pipe & Fittings



PlatinumStripe® 1800 PE-RT significantly expands the operation window for polyethylene (PE) pipes with pressure ratings up to 180°F. PlatinumStripe® 1800 PE-RT is intended for high-temperature industrial, mining, oil and gas gathering applications.

Complies with:

- ASTM D3350 Cell Class PE445574C
- ASTM D2837 HDB = 800 psi at 180°F
- ASTM F2619 HDPE Line Pipe
- API 15 LE Polyethylene Line Pipe
- ASTM F714 Polyethylene Pipe
- ASTM D3261 and D2513 (Molded Fittings)
- ASTM F2206 (Fabricated Fittings)

Key Benefits of PlatinumStripe® 1800 PE-RT piping systems:

- Higher permissible operating temperatures compared to standard PE4710 products
- Allows continuous operation at temperatures from -49°F (-45°C) to 180°F (82°C)
- Intermittent operating temperatures up to 203°F (95°C) are possible for some applications
- >20 times PE4710 requirements for stress crack resistance
- Allows use of native backfill material from trench (sandless installation) for shallow, non-traffic applications
- Follows same fusion parameters as standard PE4710 pipes
- Patented stabilizer system for high temperature oxidative environments with ASTM D3350 CC3 rating
- Full range of pipe sizes, pressure capabilities, molded and fabricated fittings

PlatinumStripe® 1800 PE-RT is identified with four platinum color stripes.

PlatinumStripe® 1800 PE-RT Pipe Material Physical Properties		
Property	Standard	Typical Value+
Material Designation	ASTM F714, ASTM F2619	PE 4710
Cell Classification	ASTM D3350	445574C (black)
Density [4]	ASTM D792	0.950 g/cc (natural)
Melt Index [4]	ASTM D1238	0.1 g/10 min
Flexural Modulus [5]	ASTM D790B	150,000 psi
Tensile Strength [5]	ASTM D638	>3500 psi
SCG (PENT) [7]	ASTM F1473	10,000 hours
HDB at 73°F (23°C) [4] HDB at 180°F (82.2°C)	ASTM D2837	1600 psi 800 psi
Color [C]	D3350	Black

This is not a product specification and does not guarantee or establish specific minimum or maximum values or manufacturing tolerance for material or piping products to be supplied. Values obtained from tests of specimens taken from piping product may vary from these typical values.

Common Dimension Ratios for PlatinumStripe™ 1800 PE-RT

IPS		DR7			DR9			DR11			DR17			DR21		
Pipe Size in.	OD, in.	Min. wall, in.	Avg. ID, in.	Wgt. lbs/ft.	Min. wall, in.	Avg. ID, in.	Wgt. lbs/ft.	Min. wall, in.	Avg. ID, in.	Wgt. lbs/ft.	Min. wall, in.	Avg. ID, in.	Wgt. lbs/ft.	Min. wall, in.	Avg. ID, in.	Wgt. lbs/ft.
2	2.375	0.339	1.656	0.90	0.26	1.82	0.77	0.22	1.92	0.64	0.14	2.08	0.43			
3	3.50	0.500	2.440	2.06	0.39	2.68	1.66	0.32	2.83	1.39	0.21	3.06	0.94			
4	4.50	0.643	3.137	3.40	0.50	3.44	2.75	0.41	3.63	2.31	0.27	3.94	1.55	0.21	4.05	1.27
6	6.625	0.946	4.619	7.37	0.74	5.07	5.96	0.60	5.35	5.00	0.39	5.80	3.36	0.32	5.96	2.75
8	8.625	1.232	6.013	12.50	0.96	6.59	10.11	0.78	6.96	8.47	0.51	7.55	5.69	0.41	7.75	4.66
10	10.75	1.536	7.494	19.42	1.19	8.22	15.70	0.98	8.68	13.16	0.63	9.41	8.83	0.51	9.66	7.24
12	12.75	1.821	8.889	27.31	1.42	9.75	22.08	1.16	10.29	18.51	0.75	11.16	12.43	0.61	11.46	10.19
14	14				1.56	10.70	26.63	1.27	11.30	22.32	0.82	12.25	14.98	0.67	12.59	12.28
16	16				1.78	12.23	34.78	1.46	12.92	29.15	0.94	14.01	19.57	0.76	14.38	16.04
18	18				2.00	13.76	44.02	1.64	14.53	36.89	1.06	15.75	24.77	0.86	16.18	20.30
20	20				2.22	15.29	54.34	1.82	16.15	45.54	1.18	17.51	30.58	0.95	17.98	25.07
22	22							2.00	17.76	55.10	1.29	19.26	37.00	1.05	19.78	30.33
24	24							2.18	19.37	65.58	1.41	21.01	44.03	1.14	21.58	36.10
26	26										1.53	22.76	51.67	1.24	23.38	42.36
28	28										1.65	24.51	59.93	1.33	25.17	49.13
30	30										1.77	26.26	68.80	1.43	26.97	56.40
32	32										1.88	28.01	78.28	1.52	28.77	64.17
34	34										2.00	29.76	88.37	1.62	30.57	72.44
36	36										2.12	31.51	99.07	1.71	32.37	81.21
42	42													2.00	37.76	110.54

Pipe weights are calculated in accordance with PPI TR-7. Average inside diameter is calculated using Nominal OD and Minimum wall plus 6% for use in estimating fluid flow. Actual ID will vary. When designing components to fit the pipe ID, refer to pipe dimensions and tolerances in the applicable pipe manufacturing specification. Additional sizes and DR available. Contact Performance Pipe or visit www.performancepipe.com

Design Pressures

Operating Temperatures

Application	Dimensional Ratio	73°F	100°F	120°F	140°F	160°F	180°F
Water, Brine Alcohols, Glycols, and Dry Natural Gas (non 49CFR192 applications)	DR 7	333 psig	280 psig	244 psig	210 psig	187 psig	167 psig
	DR 9	250 psig	210 psig	183 psig	158 psig	141 psig	125 psig
	DR 11	200 psig	168 psig	146 psig	126 psig	112 psig	100 psig
	DR 13.5	160 psig	134 psig	117 psig	101 psig	90 psig	80 psig
	DR 17	125 psig	105 psig	91 psig	79 psig	70 psig	63 psig
	DR 21	100 psig	84 psig	73 psig	63 psig	56 psig	50 psig
2% or Greater Concentrations of Liquid Hydrocarbons or Other Solvating/Permeating Chemicals	DR 7	167 psig	140 psig	122 psig	105 psig	94 psig	84 psig
	DR 9	125 psig	105 psig	92 psig	79 psig	71 psig	63 psig
	DR 11	100 psig	84 psig	73 psig	63 psig	56 psig	50 psig
	DR 13.5	80 psig	67 psig	59 psig	51 psig	45 psig	40 psig
	DR 17	63 psig	53 psig	46 psig	40 psig	35 psig	32 psig
	DR 21	50 psig	42 psig	37 psig	32 psig	28 psig	25 psig

The above pressures are the maximum long-term pressure ratings for the applications shown. Different chemical and environmental use considerations may require use of additional design factors or additional service life considerations.



**Geothermal Distribution AC Piping Replacement
Opinion of Probable Construction Costs**

Division	Description	Quantity	Units	Cost per Unit (\$)	Installation Multiplier	Cost (nearest \$100)
1	GENERAL CONDITIONS					15,000
	Geotechnical Allowance	1	EA	15,000	1.0	15,000
2	CIVIL / SITEWORK					1,953,600
	As-Built Survey	9100	LF	1	1.0	9,100
	Traffic Control	120	Days	1,500	1.0	180,000
	Pavement Removal, 4-inches thick	2100	SY	8	1.0	16,800
	Pavement Replacement, 4-inches thick	2100	SY	55	1.0	115,500
	6-inch Geothermal Distribution Piping, incl. 4ft - T,B, & C	750	LF	90	1.0	67,500
	8-inch Geothermal Distribution Piping, incl. 4ft - T,B, & C	7155	LF	100	1.0	715,500
	10-inch Geothermal Distribution Piping, incl. 4ft - T,B, & C	4625	LF	110	1.0	508,800
	Directional Drill under Highway	250	LF	400	1.0	100,000
	New Air Release Valve Stations	3	EA	25,000	1.0	75,000
	10-inch Gate Valves, incl. boxes, etc.	12	EA	5,500	1.0	66,000
	8-inch Gate Valves, incl. boxes, etc.	18	EA	5,000	1.0	90,000
	6-inch Gate Valves, incl. boxes, etc.	2	EA	4,700	1.0	9,400
	Service Reconnection	35	EA	900	1.0	31,500
					SUBTOTAL 1	1,968,600
	CONSTRUCTION PRORATES (See Note 1)	10.0%	of Subtotal 1	196,860	1.0	196,900
	CONTRACTOR'S OVERHEAD & PROFIT (See Note 2)	15.0%	of Subtotal 1	295,290	1.0	295,300
					SUBTOTAL 2	2,460,800
	CONTINGENCY (See Note 4)	40.0%	of Subtotal 2	984,320	1.0	984,400
					SUBTOTAL 3	3,445,200
	ENGINEERING COSTS	15.0%	of Subtotal 3	516,780	1.0	516,800
					TOTAL	3,962,000

Notes

1 Construction Prorates ^{(a) (b)}**10%**

- (a) General conditions includes cost associated with permits, licenses, insurance, environmental safe guards, sediment and drainage control, and special construction practices to maintain continued plant operations. Also includes misc construction materials needed for project not included above.

2 Contractor's Overhead & Profit ^(a)**15%**

- (a) Contractor's overhead and profit include costs for mobilization/demobilization, administration, and contractor/subcontractor overhead costs and profits.

4 Design Contingency ^(a)**40%**

- (a) The design contingency is added to the subtotal based on the conceptual nature of information developed for this evaluation.

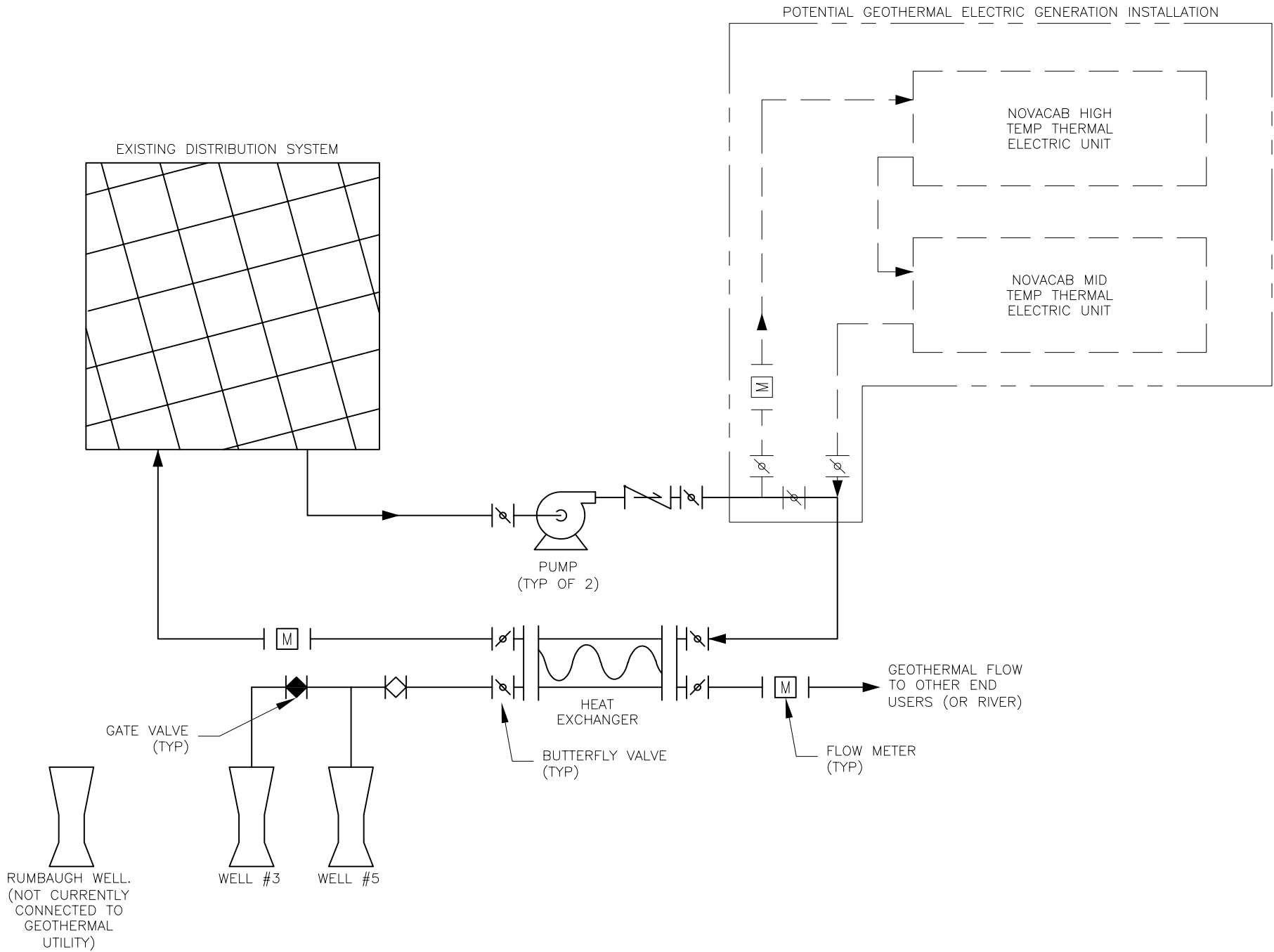
Technical Memorandum
Geothermal System Assessment



APPENDIX E

Novacab Equipment Estimate

U:\Projects\4092\008-01\2-0 Wkx Prod\2-1 A CAD\FIGURES\Geothermal PFD LAST SAVED: 6/30/2020 10:45 AM LAST PLOTTED: 6/30/2020 12:07 PM BY: SOMER



eCOPYRIGHT 2020, PLUMMER

FIGURE No. B

PAGOSA SPRINGS GEOTHERMAL SYSTEM
PROCESS FLOW DIAGRAM

SMART PHASES INC. Multi-sources TESS/Geothermal for the Pagosa Spring project

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Geothermal with TESS Project



DRAFT (For Discussions) May 2020

**CONFIDENTIAL - PROPRIETARY
INFORMATION**

1

A 250 kW Peak / 2-TESS system

- 2-TESS Approach

- At the Pagosa Spring site, the remaining geothermal power output, without the aid of the TESS, cannot easily be exploited to match the (micro)grid demand and is seriously restricted by grid connection/stability issues introduced by the intermittent low-grad (temperature) nature of waste heat sources.
- The 2 – TESS with Fast Response Converter coupled with the “remaining” waste heat curtail insufficient use of this heat, resulting in a substantial reduction in energy rejection and increase in generated revenues (optional tie-in with Solar is possible but not required).
- The Novacab integrated system aims:
 - 1st to use the cheap and wasted thermal power to achieve the heat demand of nearby users or District Heating (DH)/Snow Melting and,
 - 2nd to convert a substantial portion of the stored energy back to the grid or to compensate parasitic loads (with the converter), therefore improving the utilization of waste (geothermal) energy.



DRAFT (For Discussions) May 2020

**CONFIDENTIAL - PROPRIETARY
INFORMATION**

2

The 250 kW Smart Phases TESS system

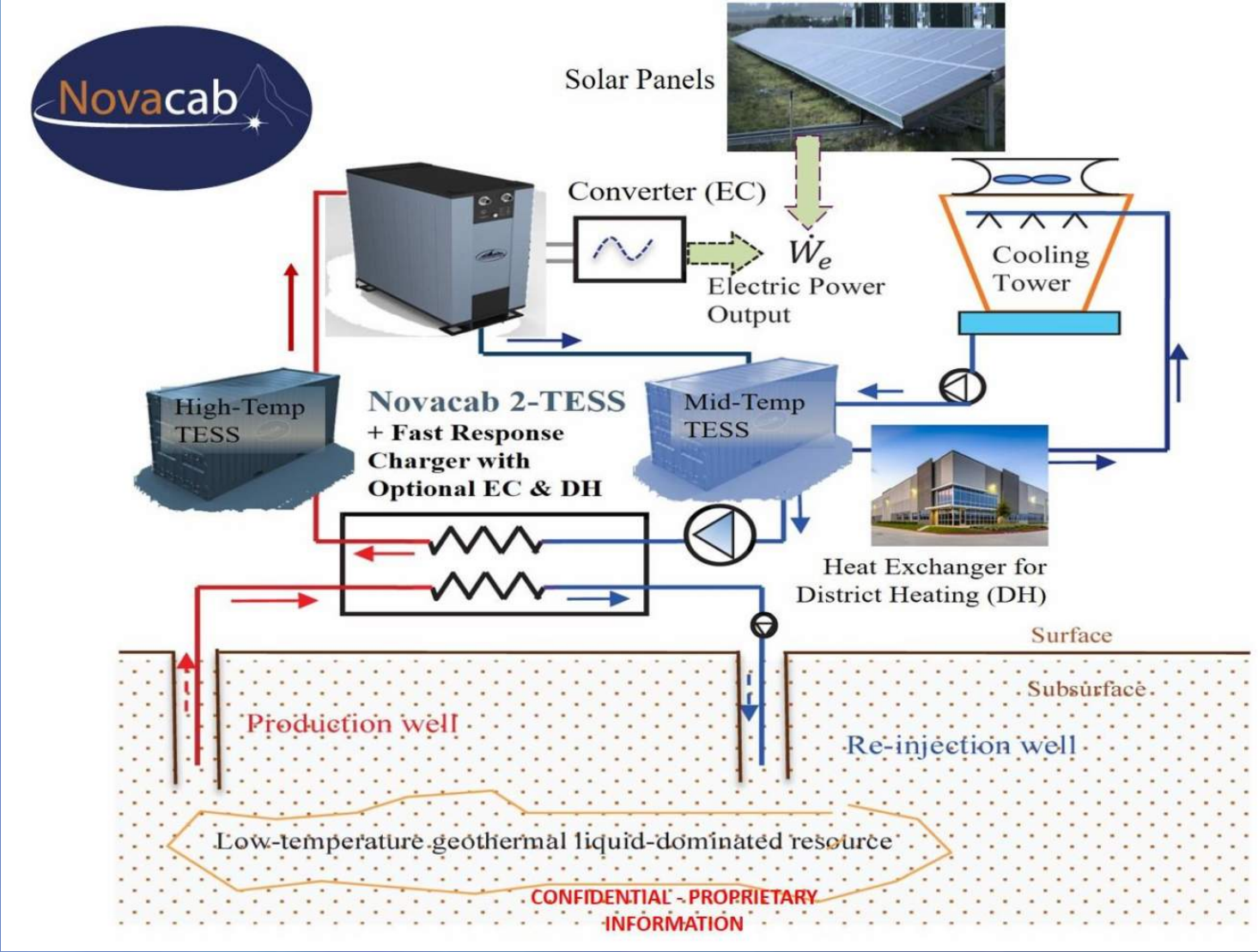
- Heat recovery:
 - From 110 F water in Winter
 - From 143 F water in Summer
- Estimated Cost of equipment
 - Double TESS + Converter + Controller system (Solar PV optional)
 - \$805,000 (before grants, taxes, installation, PV, etc.)
- Potential production
 - 250 kW in the Summer (up to 962 MWh/season)
 - 180 kW in the Winter (up to 672 MWh/season)
 - For a potential of XXXX MWh/year
 - or \$179,800 (@\$0.11/kWh)
- Potential Payback of 4.5 years for the equipment



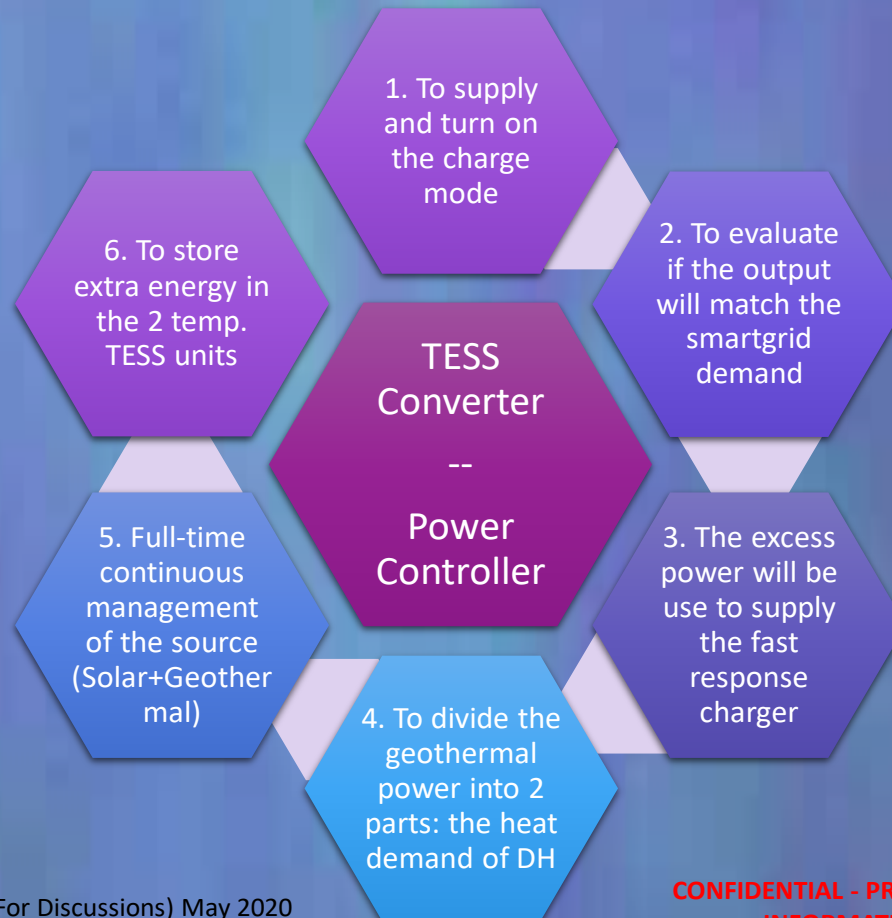
DRAFT (For Discussions) May 2020

**CONFIDENTIAL - PROPRIETARY
INFORMATION**

3



The Novacab “SmartPhases” Converter



- A smart controller optimizing the dual Temperature TESS units
- To maximize the thermal response/storage with:

- The light blue mid-temperature TESS unit



- And the High-temperature dark blue TESS unit



DRAFT (For Discussions) May 2020

CONFIDENTIAL - PROPRIETARY
INFORMATION



AGENDA BRIEF

MEETING: Town Council - 16 Sep 2025

FROM: Kyle Rickert

PROJECT: Resolution 2025-16, Supporting the Submittal of CPW Non-Motorized Trails Grant Application

ACTION: Council action

ATTACHMENTS:

[Res 2025-16 Authorizing submittal of CPW grant application](#)

[TTLT Trail Map edit](#)

FISCAL IMPACT:

The grant could provide up to \$250,000 in funding; 25% (up to \$62,500) match from Town of Pagosa Springs

TOWN COUNCIL GOALS & OBJECTIVES:

Town to Lakes Trail Master Plan April 2011

RECOMMENDATIONS:

1. Move to Approve Resolution 2025-16.
2. Move to Deny Resolution 2025-16 and provide direction to Town Staff.



TOWN OF PAGOSA SPRINGS, COLORADO

RESOLUTION NO. 2025-16

**A RESOLUTION SUPPORTING THE SUBMITTAL OF A
COLORADO PARKS AND WILDLIFE NON-MOTORIZED TRAILS
GRANT APPLICATION FOR THE TOWN TO LAKES TRAIL**

WHEREAS, the Town of Pagosa Springs ("Town") is a home rule municipality duly organized and existing under Article XX of the Colorado Constitution and the Pagosa Springs Home Rule Charter of 2003, as amended ("Charter"); and

WHEREAS, the Town of Pagosa Springs and Archuleta County have adopted the Town to Lakes Trail Master Plan in April 2011 which identifies the need for a non-motorized pedestrian and bicycle commuter trail for community residents and visitors to safely navigate between downtown and the Pagosa Lakes uptown district without the need for vehicular travel; and

WHEREAS, the Town and Pagosa Lakes Property Owners Association have completed numerous trails, sidewalks, pedestrian bridges and crosswalk improvements since 2011 that provide safe, non-motorized options for travel within our community that will naturally tie into the completed Town to Lakes non-motorized commuter trail providing connectivity within our entire community; and

WHEREAS, the Town is interested in applying for Colorado Parks and Wildlife Non-Motorized Trail grant funding for the construction of the 10th Street to Great West Avenue trail segment which is currently under engineering and design.

NOW, THEREFORE, BE IT RESOLVED BY THE TOWN COUNCIL OF THE TOWN OF PAGOSA SPRINGS, COLORADO, that:

1. The Town Council of Pagosa Springs strongly supports the submission of a Colorado Parks and Wildlife Non-Motorized Trail grant application in an amount of up to Two Hundred and Fifty Thousand Dollars (\$250,000) for the construction of the 10th Street to Great West Ave segment of the Town to Lakes commuter trail. They recognize their financial and legal obligations attached to submitting an application for this grant opportunity.
2. The Town Council supports the financial match of 25% (up to \$62,500) of the grant request and fully understands that project costs above and over the grant award and Town's match are the financial responsibility of the Town.

Town of Pagosa Springs, Colorado
Resolution No. 2025-16
Page 2

3. The Town Council confirms the Town of Pagosa Springs is capable of providing the appropriate staff and staff time to execute the proposed project.
4. The Town Council supports the project's completion and long-term maintenance and verifies that the target property will be open to the public and under the control of the applicant and/or partner for at least 25 years.
5. The Town Council authorizes the Town Manager and/or the Town Mayor to sign the grant application and grant contract documents.
6. Severability. If any part, section, subsection, sentence, clause or phrase of this Resolution is for any reason held to be invalid, such invalidity shall not affect the validity of the remaining provisions.
7. Effective Date. This Resolution shall take effect and be enforced immediately upon its approval by the Council.

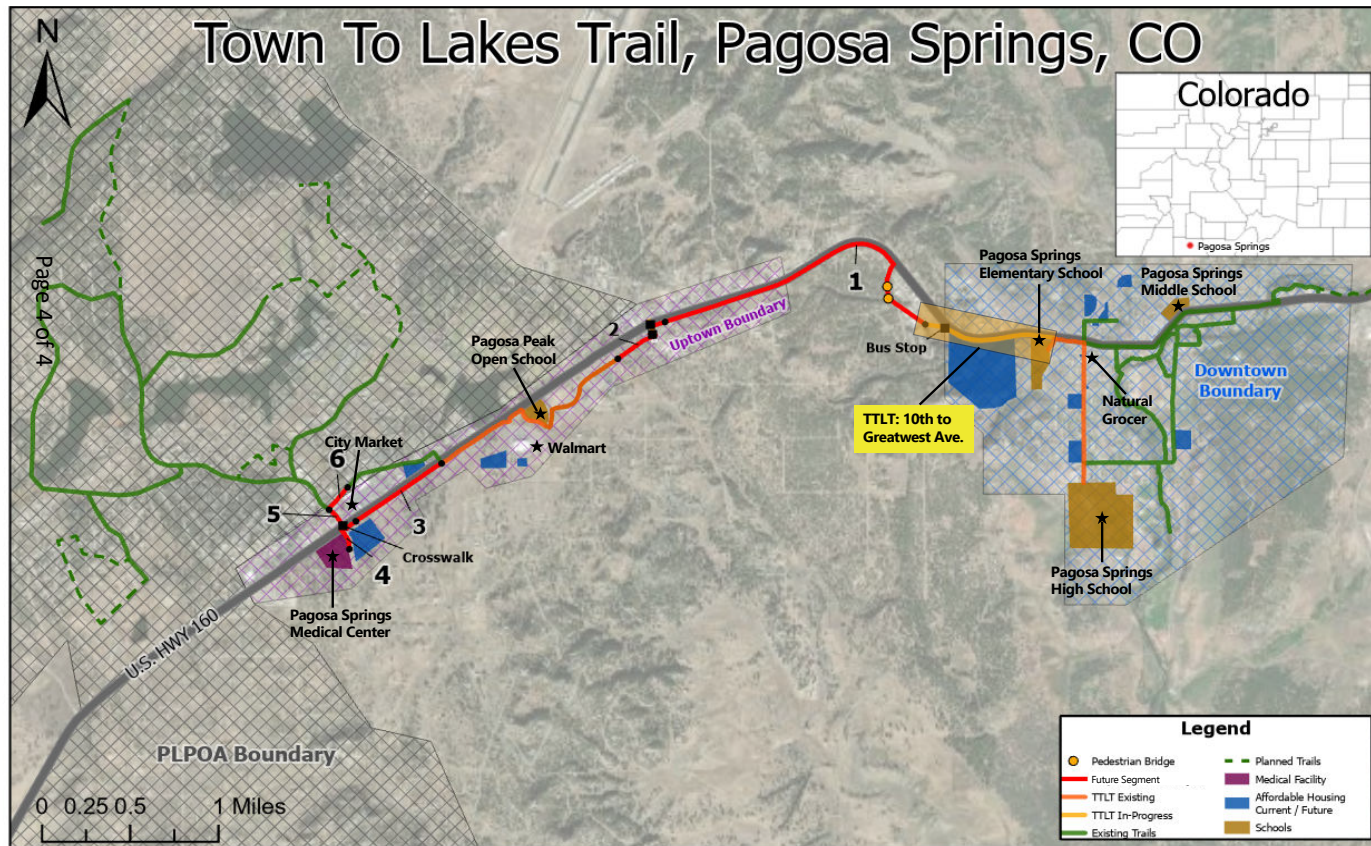
ADOPTED THIS ____ DAY OF _____, 2025 BY THE TOWN COUNCIL OF THE TOWN OF PAGOSA SPRINGS, BY A VOTE OF ____ IN FAVOR, ____ AGAINST.

TOWN OF PAGOSA SPRINGS, COLORADO

By: _____
Shari Pierce, Mayor

ATTEST:

By: _____
April Hessman, Secretary





AGENDA BRIEF

MEETING: Town Council - 16 Sep 2025

FROM: Kyle Rickert

PROJECT: Resolution 2025-17, Approving Submission of State Historical Fund Grant Application

ACTION: Council action

PURPOSE/BACKGROUND:

The Water Treatment Facility and the Rumbaugh Creek Stone Arched Bridge are both individually designated local historic landmarks owned by the Town. The requested State Historic fund grant will enable further restoration efforts on these two historic landmarks.

The Town leases the Historic Water Treatment Building to the San Juan Museum Historic Museum. The roof has been problematic for many years and is in need of structural improvements and the replacement of the roof membrane. The Historic Rumbaugh Creek Stone Arched Bridge has had two phases of improvements with the third phase proposed to install the stone facade on the recently replaced retaining wall, reinstall the north wing wall and reset the east spandrel wall above the arch.

The State Historic Fund provides ongoing grant support for restoration projects for eligible designated historic landmark properties and buildings. The maximum request is \$250,000, with the opportunity to receive numerous grant awards to help complete full restoration projects.

The town has previously applied for and has received three State Historical fund grants for phasing the restoration efforts for the Historic Water Treatment Facility and Historic Rumbaugh Creek Stone Arched Bridge. The Town is eligible for this funding as we are a Certified Local Government (CLG) for administering historic preservation within our Town limits.

ATTACHMENTS:

[Res 2025-17 Authorizing submittal of SHF grant application](#)

[Reynolds-Ash RoofStrucReport 2018-05-18 roof](#)

[20250806 120338](#)

[20250806 120137](#)

[20250903 165002](#)

FISCAL IMPACT:

The History Colorado General Grant would provide up to \$250,000 in funding, with a 25% (up to \$62,500) match.

TOWN COUNCIL GOALS & OBJECTIVES:

2024/2025 Objective 11, Historic Preservation

RECOMMENDATIONS:

1. Move to Approve Resolution 2025-17.
2. Move to Deny Resolution 2025-17 and provide staff with direction.



TOWN OF PAGOSA SPRINGS, COLORADO

RESOLUTION NO. 2025-17

**A RESOLUTION SUPPORTING THE SUBMITTAL OF A HISTORY
COLORADO - GENERAL GRANT FOR CONTINUED RESTORATION
EFFORTS OF THE HISTORIC WATER TREATMENT PLANT AND
RUMBAUGH CREEK STONE ARCHED BRIDGE**

WHEREAS, the Town of Pagosa Springs ("Town") is a home rule municipality duly organized and existing under Article XX of the Colorado Constitution and the Pagosa Springs Home Rule Charter of 2003, as amended ("Charter"); and

WHEREAS, the Town Council's adopted 2024-2025 Goals & Objectives includes goal 11, Historic Preservation & Culture to support and enhance multi-culturalism, honoring the community's past, present, and future through protection of historic assets, festivals, and learning opportunities; and goal 11b, Continue restoration projects to protect and teach about historic community assets; and

WHEREAS, the Town Council approved Ordinance 519 on March 26, 1999, designating the Town's Water Treatment Plant as a Local Historic Landmark; and

WHEREAS, the Town Council approved Ordinance 835 on December 1, 2015, designating the Rumbaugh Creek Stone Arched Bridge as a Local Historic Landmark; and

WHEREAS, the Town is very interested in pursuing additional restoration efforts of both the Water Treatment Plant and the Rumbaugh Creek Stone Arched Bridge. The Waterworks Facility and Rumbaugh Bridge, both locally listed historic landmarks, with the long-term goal of opening the entire site to the public for recreation, education, and historic preservation; and

WHEREAS, the Town has partnered with History Colorado on previous restoration projects on the Water Treatment Plant and the Rumbaugh Creek Stone Arched Bridge and it is motivated to complete the retaining wall stone façade from the last project we partnered on; and

WHEREAS, the Town is interested in applying for History Colorado General grant funding for structural roof improvements and the replacement of the roofing membrane of the Water Treatment building, and installation of stone facade on the Rumbaugh Bridge retaining wall and reconstruction of wing wall.

NOW, THEREFORE, BE IT RESOLVED BY THE TOWN COUNCIL OF THE TOWN OF PAGOSA SPRINGS, COLORADO, that:

1. The Town Council of Pagosa Springs strongly supports the submission of a History Colorado General Grant Application in the amount of up to Two Hundred and Fifty Thousand Dollars (\$250,000) for the improvements to the historic Water Treatment Plant and Rumbaugh Bridge site.
2. The Town Council supports the financial match of 25% (up to \$62,500) of the grant request and fully understands that project costs above and over the grant award and Town's match are the financial responsibility of the Town.
3. The Town Council confirms the Town of Pagosa Springs is capable of providing the appropriate staff and staff time to execute the proposed project.
4. The Town Council authorizes the Town Manager and/or the Town Mayor to sign the grant application and grant contract documents.
5. Severability. If any part, section, subsection, sentence, clause or phrase of this Resolution is for any reason held to be invalid, such invalidity shall not affect the validity of the remaining provisions.
6. Effective Date. This Resolution shall take effect and be enforced immediately upon its approval by the Council.

ADOPTED THIS ____ DAY OF _____, 2025 BY THE TOWN COUNCIL OF THE TOWN OF PAGOSA SPRINGS, BY A VOTE OF ____ IN FAVOR, ____ AGAINST.

TOWN OF PAGOSA SPRINGS, COLORADO

By: _____
Shari Pierce, Mayor

ATTEST:

By: _____
April Hessman, Secretary











AGENDA BRIEF

MEETING: Town Council - 16 Sep 2025

FROM: James Dickhoff, Development Director

PROJECT: Ordinance 1019, First Reading, Amending the Official Zoning Map Regarding Property Known As 1040 East U.S. Highway 160.
ACTION: Council action

ATTACHMENTS:

[Ordinance 1019 - Agenda Brief - TC 09.16.25](#)

[Ord 1019 Zoning 1040 E. Hwy 160](#)

RECOMMENDATIONS:

1. Move to Approve Ordinance 1019, First Reading, Amending the Official Zoning Map Regarding Property Known As 1040 East U.S. Highway 160.
2. Move to Continue the Consideration of Ordinance 1019 on October 7, 2025.
3. Move to Deny Ordinance 1019 and provide direction to Staff.



Town Council Meeting - September 16, 2025
Staff Brief - Zoning 1040 E. Hwy 160

Project:

Ordinance 1019, First reading, Amending the Official Zoning Map Regarding Property Known As 1040 East U.S. Highway 160

Background/Purpose:

On May 05, 2025, the Town purchased 1040 E. Hwy 160 for the development of a new public river access park.

On September 09, 2025, the Planning Commission unanimously approved a recommendation for Town Council to approve zoning 1040 E. Hwy 160 as Open Space and Parks (OS).

Pursuant to LUDC section 2.3.6., Public notice was mailed to properties within 500 feet of the subject property, posted on site, published in the SUN Newspaper, and posted in Town Hall at least 15 days prior to public hearings.

Consistency with LUDC, 2018 Comprehensive Plan and other adopted and long-range plans as follows:

2018 Comprehensive Plan references:

Chapter 2, Natural Environment.

Vision:

Pagosa Springs values, protects, and enhances the beauty and health of its natural environment.

"Access to the San Juan River is important for recreation, economic development and community culture. As the natural environment is critical to the tourism industry, its protection is necessary. Balancing access with preservation of the natural system will assure the environment remains healthy and vibrant."

Chapter 4, Human Environment.

Goal T:

"Create high-quality, convenient, and safe connections for pedestrians and bicyclists. The Town aims to provide a variety of opportunities to both residents and visitors for recreation and transportation."

Chapter 2, Natural Environment.

Goal N-2:

Develop guidelines, regulations, and educational programs that protect area wildlife.

C. Provide wildlife interpretive areas along trails, parks and open space where feasible.

Goal N-1:

Protect and conserve water resources, water quality, the San Juan River corridor, streams, lakes, wetlands, and geothermal resources.

Chapter 5, Economic Vitality,

Goal E-3:

Continue to support the tourism economic base.

Chapter 6, Infrastructure and Government.

Goal G-1:

Continue to provide a high level of public services and maintain existing facilities while aiming to provide needed and desired improvements.

Actions:

A. Prioritize improvements to facilities in the community consistent with recommendations in this Comprehensive Plan, the Downtown Master Plan and other adopted plans*.

*Other plans include the River Corridor Master Plan and the East End Multi Modal Plan.

East End Multi Modal Plan references:

OPPORTUNITIES:

SAN JUAN RIVER, RIVERWALK, AND RESERVOIR HILL TRAILHEAD

The San Juan River, adjacent Riverwalk, and access to Reservoir Hill are great recreational amenities. Providing clear access to these features will make them more visible and highly used, and expanding the Riverwalk to the East will improve its function.

CONSTRAINTS:

HIDDEN RIVER CENTER PARK

River Center Park is a great amenity with the Riverwalk trail and several other recreational features, but with the Riverwalk dead-ending on each side of the study area and no clear parking/ signage for the park, it is not well used. There is also no formal river access, leading to competing interests with adjacent businesses since portions of the Riverwalk are currently within an easement.

2011 River Corridor Master Plan:

The River Corridor Master Plan Identified 1040 E. Hwy 160 as a future public river access park. See attached.

LUDC section 2.4.2.C.2.a, Rezoning Approval Criteria:

The Town Council may approve rezonings, and the Planning Commission may recommend approval, if the rezoning meets all of the following criteria:

- (1) The rezoning will promote the public health, safety, and general welfare;
The new Park improvements will substantially improve the east gateway entrance to our community and provides a new recreation access for enjoy the San Juan River and providing a future opportunity for extending the Riverwalk trail.
- (2) The rezoning is consistent with the Comprehensive Plan and the purposes of this Land Use Code;
The Open Space and Parks zoning is consistent with the intent and many goals contained in the 2018 Comprehensive Plan
- (3) The rezoning is consistent with the stated purpose of the proposed zoning district(s);
The Open Space and Parks zoning is consistent with the proposed and intended use of the property as a Public River Access Park.
- (4) Facilities and services (including roads and transportation, water, gas, electricity, police and fire protection, and sewage and waste disposal, as applicable) will be available to serve the subject property while maintaining adequate levels of service to existing development;
The property has existing water, sanitary sewer, Electric and Natural Gas infrastructure. The property is in an area that is served by the Fire Protection District, and will be served by the Town Police Department. Hwy 160 provides existing access to the property.
- (5) The rezoning is not likely to result in significant adverse impacts upon the natural environment, including air, water, noise, stormwater management, wildlife, and vegetation, or such impacts will be substantially mitigated; and
Prior to purchasing the proper, an Environmental Assessment was conducted in conjunction with the Pagosa Gateway River Improvement project (PGP). The eddy structures at the bottom of the boat ramp were permitted along with the PGP. A Wetland delineation was commissioned as part of the property purchase indicating wetland boundaries. All the above are critical for identifying any potential mitigation measures that will be needed during the conceptual and final planning processes.
- (6) The rezoning is not likely to result in significant adverse impacts upon other property in the vicinity of the subject tract.
No adverse impacts have been identified. The improvement of the property will result in a more appealing east gateway entrance to downtown.

TOWN OF PAGOSA SPRINGS, COLORADO

**ORDINANCE NO. 1019
(SERIES 2025)**

**AN ORDINANCE OF THE TOWN OF PAGOSA SPRINGS
AMENDING THE OFFICIAL ZONING MAP
REGARDING PROPERTY KNOWN AS
1040 EAST U.S. HIGHWAY 160**

WHEREAS, the Town of Pagosa Springs (“Town”) is a home rule municipality duly organized and existing under Article XX of the Colorado Constitution and the Pagosa Springs Home Rule Charter of 2003, as amended; and

WHEREAS, Section 11.2.A. of the Charter provides that the Town Council may adopt land use and development ordinances, including but not limited to zoning ordinances, subdivision ordinances and an official map of the Town; and

WHEREAS, the Town has provided in the Pagosa Springs Municipal Code (“Code”), within Chapter 21 (“Land Use Code”), Articles 2 through Article 6, for zoning districts, use regulations, dimensional requirements, and development and design standards, for the purpose of promoting the health, safety, morals and general welfare of the Town; and

WHEREAS, the Land Use Code, Section 2.4.2, allows for the Town’s Official Zoning Map to be amended by the Town Council following a recommendation by the Planning Commission; and

WHEREAS, the Property has been annexed into the Town’s Boundary pursuant to Ordinance 1018 (2025 Series), and Section C.R.S. 31-12-115 provides that initial zoning of the Property upon annexation may occur concurrently with annexation, and shall occur within ninety days after the effective date of the Annexation Ordinance, irrespective of any legal review which may be instituted pursuant to Section 31-12-116, C.R.S.; and

WHEREAS, On September 9, 2025 the Town of Pagosa Springs Planning Commission considered the proposed Open Space and Parks zoning designation and provided a recommendation to the Town Council to approve the zoning of property known as the 1040 E. U.S. Hwy 160 Annexation to Open Space and Parks; and

WHEREAS, the Town Council has at a public hearing as provided for in the Land Use Code, Sections 2.3.6, 2.3.7 and 2.4.2, considered the Application, the recommendation of the Planning Commission, the report of Town staff, the testimony members of the public, and other evidence presented at such hearing; and

WHEREAS, the Town Council finds and determines zoning the Property as Open Space and Parks (OS) Zoning District:

1. Will initially zone the Property under the Town's Land Use Code upon its recent annexation to the Town;
2. Will promote the public health, safety, and general welfare;
3. Is consistent with the Comprehensive Plan and the purposes of the Code;
4. Is consistent with the stated purpose of the proposed zoning district;
5. Will result in facilities and services (including roads and transportation, water, gas, electricity, police and fire protection, and sewage and waste disposal, as applicable) available to serve the Property while maintaining adequate levels of service to existing development;
6. Is not likely to result in significant adverse impacts upon the natural environment, including air, water, noise, stormwater management, wildlife, and vegetation, or such impacts will be substantially mitigated; and
7. Is not likely to result in significant adverse impacts upon other property in the vicinity of the Property; and

WHEREAS, the Town Council further finds zoning the property is necessary to advance the general welfare of the Town.

NOW, THEREFORE, BE IT ORDAINED BY THE TOWN COUNCIL OF THE TOWN OF PAGOSA SPRINGS, COLORADO, as follows:

1. **Incorporation of Recitals.** The recitals set forth above are incorporated and ordained hereby as if set forth hereafter in full.
2. **Zoning Approval.** The Application is approved; the base zoning district classification of the Property is Open Space and Parks (OS).
3. **Amendment of Zoning Map.** The official zoning map of the Town of Pagosa Springs, dated February 3, 2009, as amended, is further amended to designate Open Space and Parks (OS) as the base zoning for 1040 E. U.S. Highway 160.
4. **Public Inspection.** The full text of this Ordinance, with any amendments, is available for public inspection at the office of the Town Clerk.
5. **Severability.** If any portion of this Ordinance is found to be void or ineffective, it shall be deemed severed from this Ordinance and the remaining provisions shall remain valid and in full force and effect.
6. **Effective Date.** This Ordinance shall become effective and be in force immediately upon final passage at second reading and after ordinance 1018 (Series 2025) annexing the subject property has been recorded with the Archuleta County Clerk and Records office.

INTRODUCED, READ, AND ORDERED PUBLISHED BY TITLE ONLY PURSUANT TO SECTION 3.9, B) OF THE PAGOSA SPRINGS HOME RULE CHARTER, BY THE TOWN COUNCIL OF THE TOWN OF PAGOSA SPRINGS, COLORADO, UPON A MOTION DULY MADE, SECONDED AND PASSED AT ITS REGULAR MEETING HELD AT THE TOWN OF PAGOSA SPRINGS, ON THE ____ DAY OF _____, 2025.

TOWN OF PAGOSA SPRINGS

By: _____
Shari Pierce, Mayor

Attest:

April Hessman, Town Clerk

FINALLY ADOPTED, PASSED, APPROVED, AND ORDERED PUBLISHED BY TITLE ONLY PURSUANT TO SECTION 3.9, D) OF THE PAGOSA SPRINGS HOME RULE CHARTER, BY THE TOWN COUNCIL OF THE TOWN OF PAGOSA SPRINGS, COLORADO, UPON A MOTION DULY MADE, SECONDED AND PASSED AT ITS REGULAR MEETING HELD AT THE TOWN OF PAGOSA SPRINGS, ON THE ____ DAY OF _____, 2025.

TOWN OF PAGOSA SPRINGS

By: _____
Shari Pierce, Mayor

Attest:

April Hessman, Town Clerk

CERTIFICATE OF PUBLICATION

I, the duly elected, qualified and acting Town Clerk of the Town of Pagosa Springs, Colorado, do hereby certify the foregoing Ordinance No. 1019 (Series 2025) was approved by the Town Council of the Town of Pagosa Springs on first reading at its **regular** meeting held on the ____ day of _____, 20__, and was published by title only, along with a statement indicating that the full text of the Ordinance is available at the office of the Town Clerk, on the Town's official website, on _____, 20__, which date was at least ten (10) days prior to the date of Town Council consideration on second reading.

IN WITNESS WHEREOF, I have hereunto set my hand and affixed the seal of the Town of Pagosa Springs, Colorado, this ____ day of _____, 20__.

April Hessman, Town Clerk

(S E A L)

I, the duly elected, qualified and acting Town Clerk of the Town of Pagosa Springs, Colorado, do hereby certify the foregoing Ordinance No. 1019 (Series 2025) was approved by the Town Council of the Town of Pagosa Springs on second reading, at its **regular** meeting held on the ____ day of _____, 20__, and was published by title only, along with a statement indicating the effective date of the Ordinance and that the full text of the Ordinance is available at the office of the Town Clerk, on the Town's official website on _____, 20__.

IN WITNESS WHEREOF, I have hereunto set my hand and affixed the seal of the Town of Pagosa Springs, Colorado, this ____ day of _____, 20__.

April Hessman, Town Clerk

(S E A L)

Ordinance 1019, Zoning Map Amendment 1040 E. Highway 160