



APPENDIX C
Parking Technical Memorandum



PARKING TECHNICAL MEMORANDUM PARADISE TRANSPORTATION MASTER PLAN

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1. Introduction

As redevelopment efforts in downtown Paradise continue and increase, it is essential to assess the future parking needs, plan for loading zones, and incorporate parking strategies that will support and encourage revitalization. Providing adequate parking will encourage business patronage and be beneficial for special events downtown. This Parking Technical Memorandum has been prepared as part of the *Paradise Transportation Master Plan (TMP)*.

The purpose of this memorandum is to:

- ▶ Document existing parking supply in the downtown area.
- ▶ Identify needs and opportunities related to parking for the downtown area as redevelopment occurs.
- ▶ Develop guidance to support commercial and redevelopment needs, such as loading zones, drop-off zones, potential for on-street time restricted parking, and parklets.
- ▶ Develop recommendations guiding Town parking policies and municipal code.

This memorandum focuses on parking needs in the downtown; primarily the area bounded by Skyway, the Yellowstone Kelly Heritage Trail, Pearson Road, and Elliott Road. However, many of the policies and recommendations could be applicable town wide.

This report builds upon Town-wide public outreach following the Camp Fire and previous planning efforts. The following planning efforts include community feedback and recommendations regarding parking in and surrounding the downtown area:

- ▶ *Long-term Community Recovery Plan* – This plan includes several references to downtown parking needs including:
 - » The Community Listening Meetings included comments to provide more downtown and off-street parking
 - » The Recovery Priorities Responses included suggestions to evaluate parking needs along Skyway
 - » The Walkable Downtown section included suggestions to:
 - Minimize parking within town blocks, and split blocks with pedestrian walkways (alleys) bordered by storefront
 - Plan now for off-street parking to serve this area
 - Provide adequate parking
 - Parking areas or even two-story structures with walking areas and no curb
 - Include pedestrian only streets with parking lots on the perimeter
 - » The Sustainable Development section included suggestions to provide shade trees and potentially solar panels to double as shade in parking lot.



Exhibit 1. Study Area



► 2000 Town of Paradise Downtown Revitalization Master Plan

- » Given the report pre-dates the Camp Fire, the recommendations may not be relevant for current conditions.
- » The report identifies a lack of convenient parking downtown.
- » The plan proposes to maintain all present on-street parking and recommends new off-street parking facilities, at convenient locations and connected to pedestrian facilities.
- » The report estimates \$825,000 in parking facility costs.

2. Existing Downtown Parking Inventory

In general, there is currently sufficient parking supply available in downtown Paradise since many businesses have not yet returned following the Camp Fire. On-street marked spaces exist primarily on Skyway between Pearson Road and Elliott Road, and along Pearson Road between Skyway and Black Olive Drive. In addition, most businesses have some limited on-site parking.

Table 1 shows the striped, on-street parking supply on primary roadways in the downtown area and current parking utilization. The parking inventory was conducted on a Monday afternoon, December 6, 2021, at 1:00 PM, during normal weekday business hours. **Figure 1**, on page 4, illustrates the existing parking supply as of December 2021.

Table 1. Downtown Parking Inventory

| Street Segment | Limits | Number of Striped On-Street Parking Spaces | Number of Parked Vehicles | % Utilized |
|-------------------------------|------------------------------|--|---------------------------|------------|
| Skyway (east side) | Pearson Road to Elliott Road | 29 | 3 | 10% |
| Skyway (west side) | Pearson Road to Elliott Road | 38 | 7 | 18% |
| Pearson Road (north side) | Skyway to Black Olive Drive | 16 | 1 | 6% |
| Pearson Road (south side) | Skyway to Black Olive Drive | 13 | 1 | 8% |
| Black Olive Drive (east side) | Pearson Road to Cedar Street | 32 | 4 | 13% |
| Foster Road | Pearson Road to Skyway | 4 | 0 | 0% |
| Fir Street | Skyway to Black Olive Drive | 6 | 1 | 17% |
| Total Striped Spaces: | | 138 | 17 | 12% |

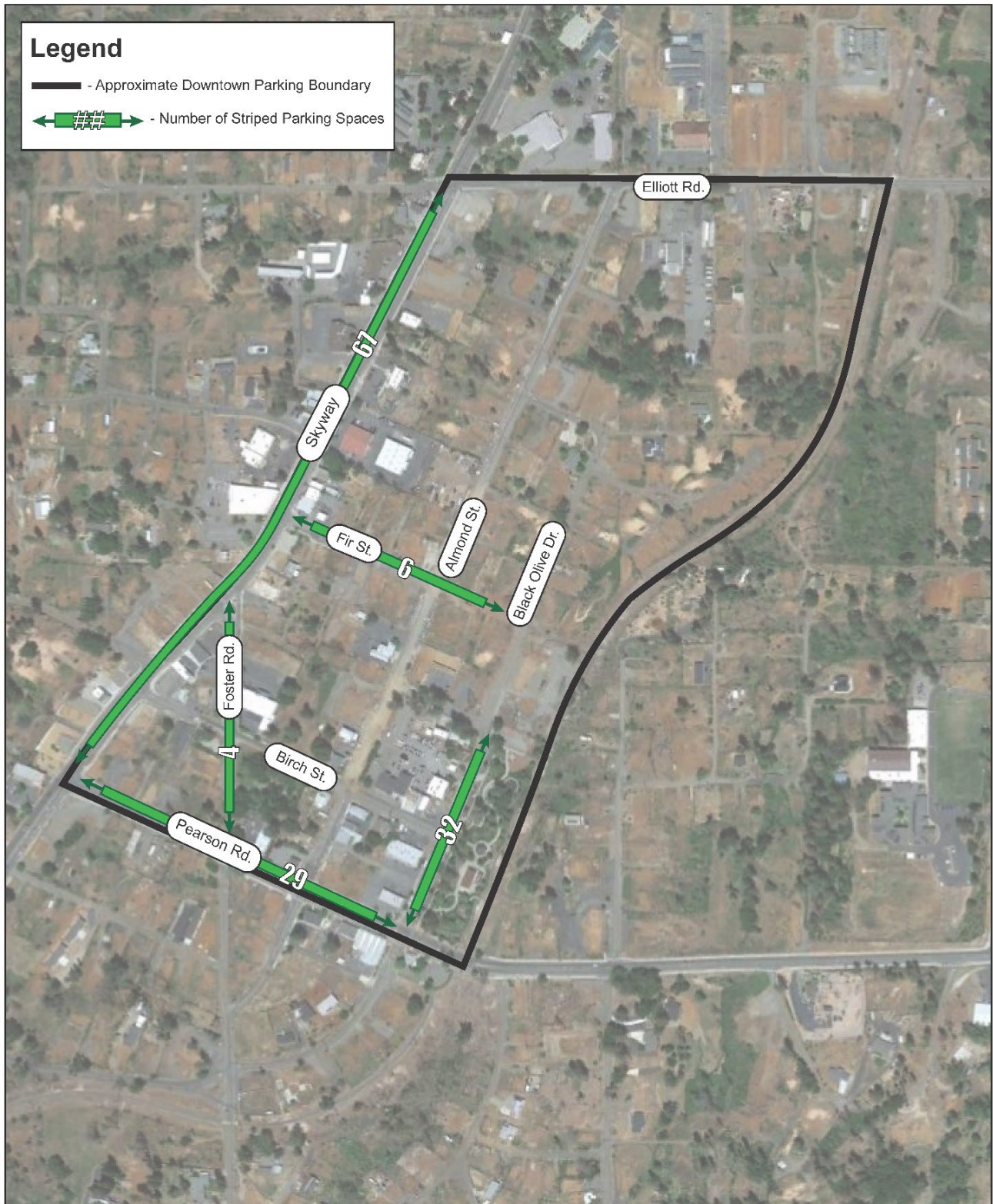
As shown in **Table 1**, there is currently adequate parking supply in the downtown area, with less than 15 percent of parking spaces utilized on a typical weekday. In addition to striped parking spaces, on-street parking is permitted on segments of downtown roadways including Elliott Road, Black Olive Drive, Almond Street, and Birch Street. A total of 12 vehicles were recorded in the inventory parked on-street along these roadways, a small percentage of the available on-street parking capacity.





Downtown Special Event Parking

Paradise Community Park located at 5570 Black Olive Drive (corner of Pearson Road and Black Olive Drive) is a major community park in the downtown area. This park hosts *Party in the Park*, a weekly summer event with vendors and live music. Parking is provided via an off-street parking lot on the west side of the park with approximately 32 spaces and with on-street parking on Black Olive Drive.





Legend

-  - Approximate Downtown Parking Boundary
-  - Number of Striped Parking Spaces



NO SCALE

Figure 1

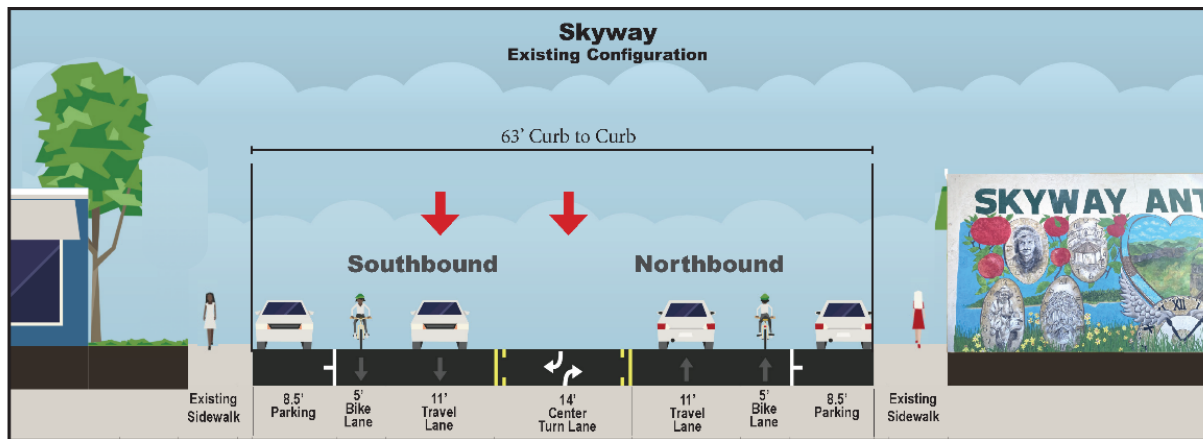
Parking Technical Memorandum
 Paradise Transportation Master Plan
 Existing Parking Inventory



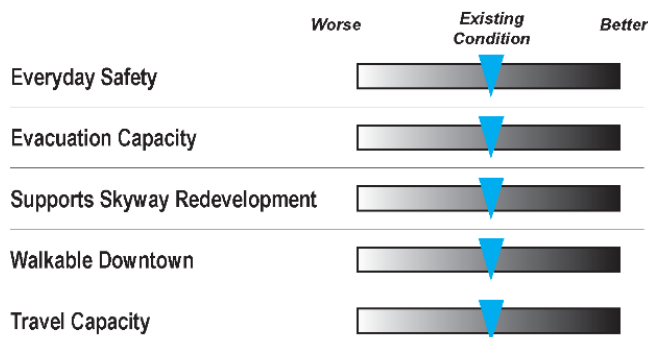
3. Future Projects Affecting Parking

1 – Skyway Reconfiguration

A key component of the *Paradise TMP* and roadway improvement recommendations is to increase vehicular capacity on Skyway between Elliott Road and Pearson Road. As directed by the Town Council in September 2021, a southbound lane will be added through roadway striping modifications to serve daily capacity needs and traffic evacuation needs. Several options were considered and presented for public comment. All alternatives came with tradeoffs to capacity, safety, and multimodal considerations. Conceptual layouts of the existing configuration and selected option for implementation are shown in **Exhibit 2 and 3**.



↓ - Probable Evacuation Directional Flow

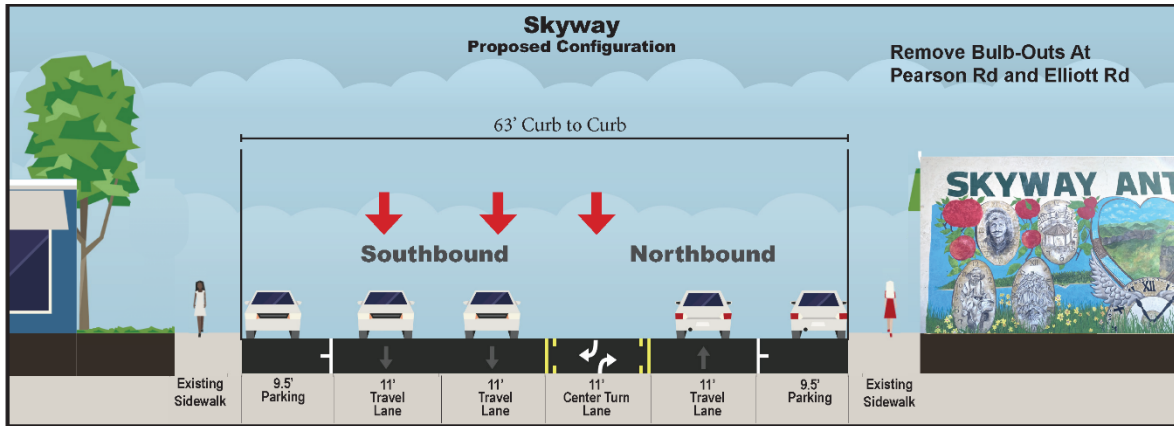


Expected Outcomes

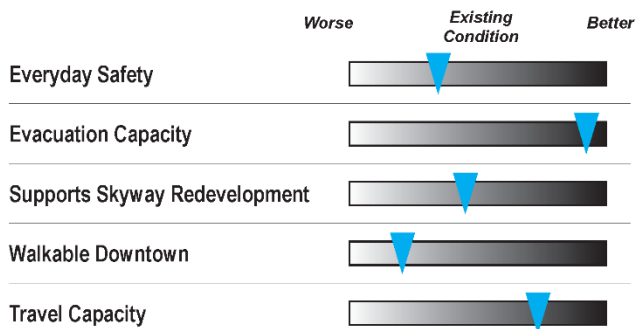
- Maintain walkable character
- Maintain all parking
- Maintain left turn safety
- Forecasted traffic congestion in 10 - 20 years

Exhibit 2. Existing Skyway between Elliott Road and Pearson Road





↓ - Probable Evacuation Directional Flow



Expected Outcomes

- Balanced approach
- Forecasted inadequate northbound capacity in 10 - 20 years

Exhibit 3. Reconfiguration of Skyway between Elliott Road and Pearson Road

The selected option (referred to as Option B) has two southbound through lanes, a two-way left-turn lane, and one northbound lane. The reconfiguration is expected to remove one on-street parking space on Skyway and remove the bicycle lane.

2 – Almond Street Multimodal Improvements and Gap Closure Complex

These Active Transportation Program grant-funded projects focus on downtown multimodal improvements including sidewalks and bikeways on:

- Almond Street
- Foster Road (Pearson Road to Birch Street)
- Birch Street
- Black Olive Drive
- Fir Street
- Elliott Road (Skyway to Almond Street)



These projects include adding approximately:

- ▶ 14 parking spaces on Almond Street between Pearson Road and Birch Street
- ▶ 36 parking spaces on Almond Street between Birch Street and Fir Street
- ▶ 21 parking spaces on Almond Street between Fir Street and Elliott Road
- ▶ 9 parking spaces on Black Olive Drive between Pearson Road and Cedar Street
- ▶ 27 parking spaces on Birch Street between Skyway and Black Olive Drive
- ▶ 26 parking spaces on Fir Street between Skyway and Black Olive Drive
- ▶ 8 parking spaces on Foster Road between Birch Street and Pearson Road

In total, these projects include approximately 141 on-street parking spaces, increasing the striped on-street parking within downtown by approximately 130 spaces.

Future Striped On-Street Parking

Table 2 shows the estimated change in on-street parking spaces with the planned projects.

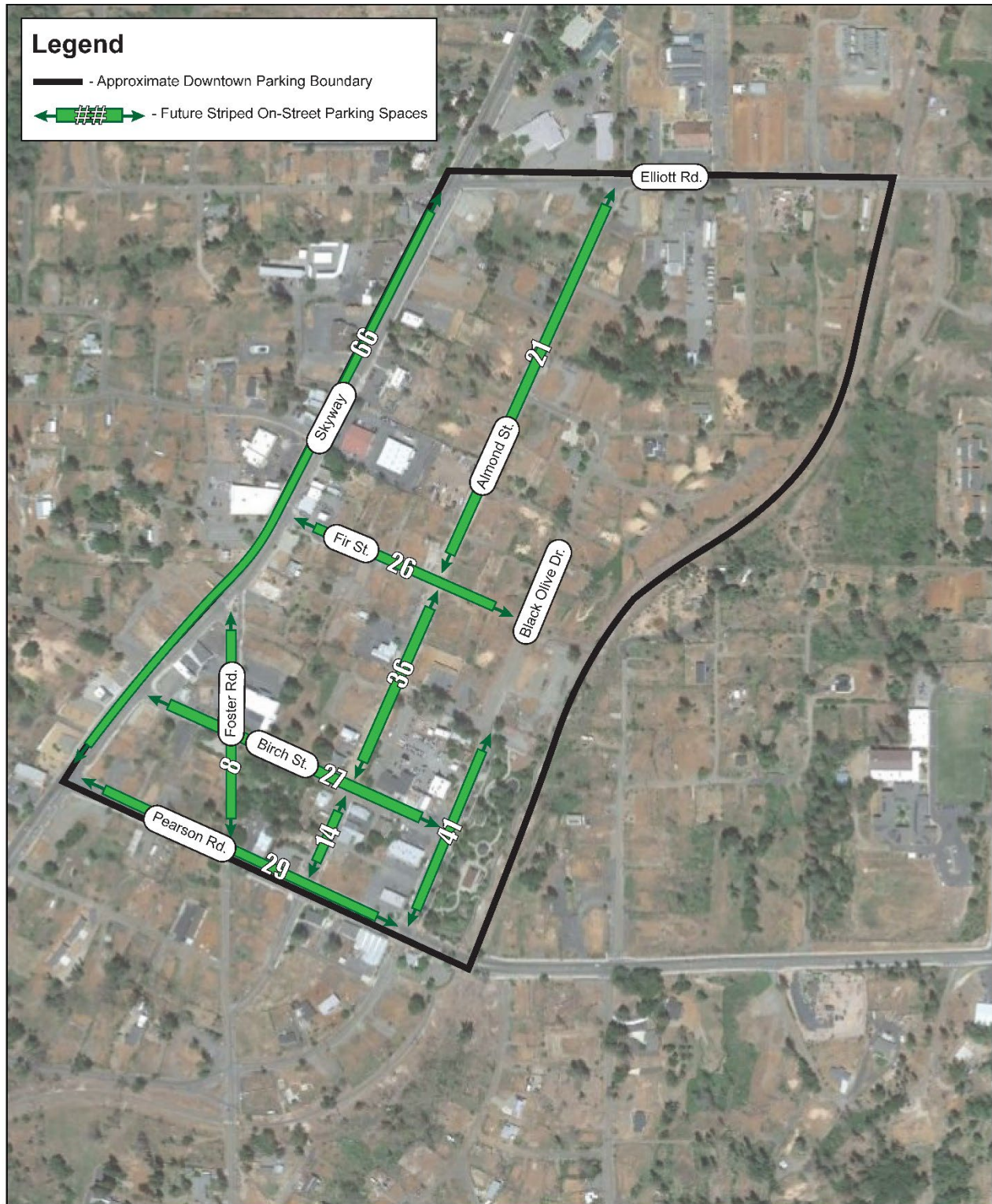
Table 2. Downtown Future Striped On-Street Parking

| Street Segment | Limits | Existing Striped Parking Spaces | Future Striped Parking Spaces |
|--------------------------|------------------------------|---------------------------------|-------------------------------|
| Skyway | Pearson Road to Elliott Road | 67 | 66 ¹ |
| Pearson Road | Skyway to Black Olive Drive | 29 | 29 |
| Black Olive Drive | Pearson Road to Cedar Street | 32 | 41 |
| Almond Street | Pearson Road to Elliott Road | 0 | 71 |
| Birch Street | Skyway to Black Olive Drive | 0 | 27 |
| Foster Road | Pearson Road to Skyway | 4 | 8 |
| Fir Street | Skyway to Black Olive Drive | 6 | 26 |
| Approximate Total | | 138 | 268 |
| | | % Increase | 94% |

Notes: 1. Skyway reconfiguration expected to remove 1 parking space

The planned infrastructure improvement projects will nearly double the number of striped on-street parking spaces in the downtown area. Figure 2, on page 8, shows the planned future parking supply of 268 marked spaces.





Legend



-  - Approximate Downtown Parking Boundary
-  - Future Striped On-Street Parking Spaces



Figure 2
 Parking Technical Memorandum
 Paradise Transportation Master Plan
 Future On-Street Parking Supply



4. Future Parking Needs

Town-wide future parking needs were estimated based on economic data from the *Town of Paradise Commercial Retail Market Analysis (Economic & Planning Systems, Inc., 2022)* prepared as part of the *Paradise TMP*.

Exhibit 4 shows the existing (pre-Camp Fire) land uses for the downtown area.

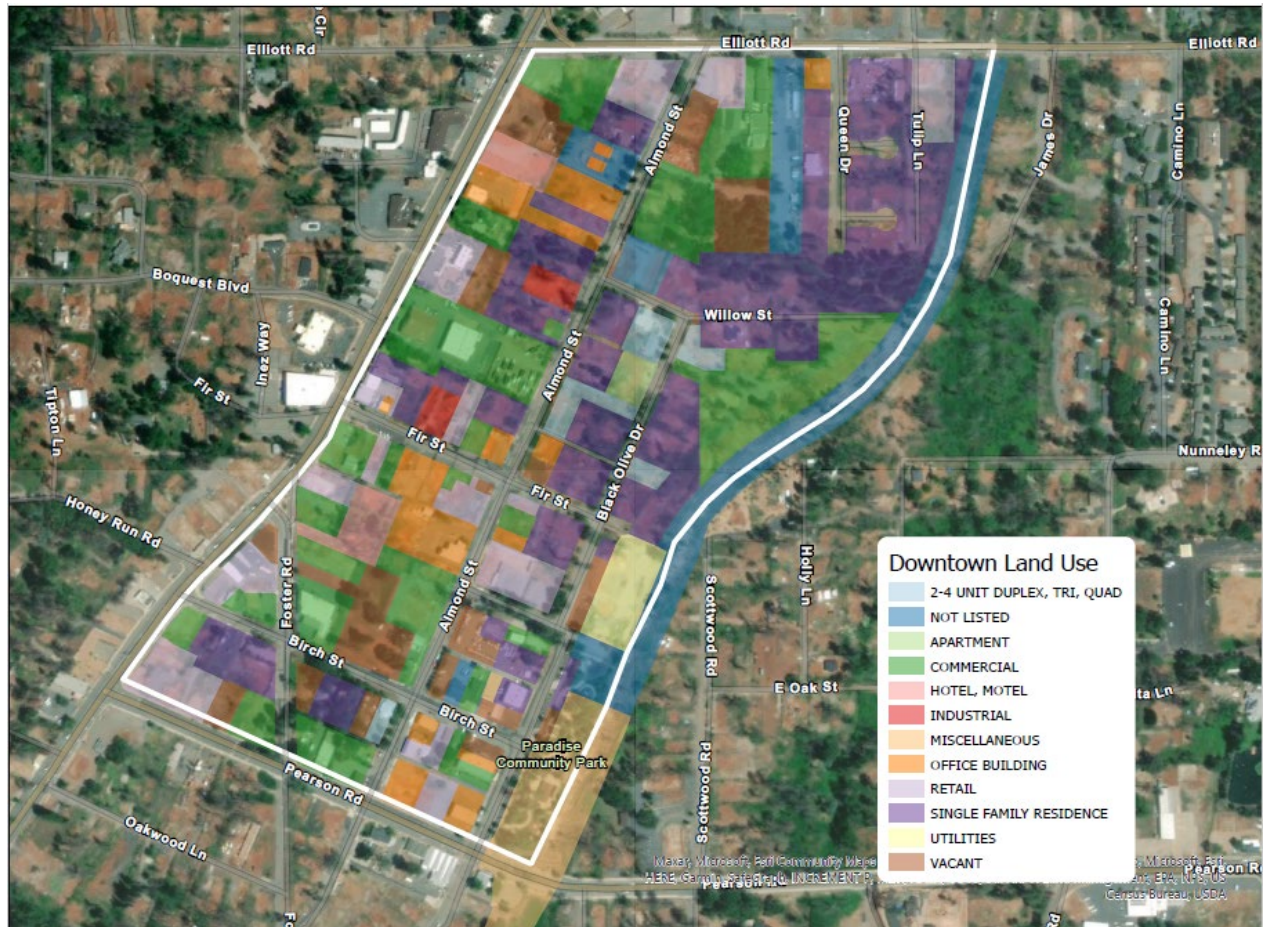


Exhibit 4. Existing Downtown Paradise Land Uses

Source: *Town of Paradise Commercial Retail Market Analysis (Economic & Planning Systems, Inc., 2022)*



Table 3 shows the estimated parking needs with the existing (pre-Camp Fire) Downtown Paradise land uses. Pre-Camp Fire, the downtown area contained approximately 815,000 building sf of various land use, with approximately 9 percent (73,000 sf) vacant. The parking generation was estimated based on the Institute of Transportation Engineers (ITE) *Parking Generation Manual, 5th edition* which estimates parking needs for various land uses (excluding single-family homes and vacant land) using the independent variable of 1,000 sf gross floor area (GFA). Parking demand was estimated using weekday rates, as these rates were generally more available and are typically higher than the weekend rates.

Table 3. Downtown Area Generated Parking

| Land Use Description ¹ | Estimated Building Sq. Ft. (1,000 sf GFA) ¹ | ITE Parking Generation Category | Weekday Parking Rates (Avg) | Generated Parking (Weekday) |
|-----------------------------------|--|---|-----------------------------|-----------------------------|
| Multifamily | 22 | 220 - Multifamily Housing (Low-Rise) ² | 0.66 | 15 |
| Retail | 80 | 876 - Apparel Store | 1.13 | 91 |
| Commercial | 181 | 814 - Variety Store | 1.13 | 205 |
| Office | 51 | 710 - General Office Building | 2.39 | 123 |
| Industrial | 8 | 110 - General Light Industrial | 0.65 | 5 |
| Hotel | 17 | 310 - Hotel ² | 0.74 | 38 |
| Utilities | 14 | 170 - Utility | 1.9 | 26 |
| Miscellaneous | 51 | N/A – Commercial Rates Assumed | 1.13 | 173 |
| Not listed | 101 | | | |
| TOTAL DOWNTOWN | | | | 674 |

Notes: 1. Source: *Town of Paradise Commercial Retail Market Analysis (Economic & Planning Systems, Inc., 2022)*

2. Rates provided by number of units/rooms; parking rates estimated from sf

Table 3 indicates that the parking demand, assuming full recovery of Downtown land uses, would be approximately 674 spaces and served by both on-site parking lots or other dedicated parking lots.



Table 4 shows the additional retail/commercial demand Town-wide estimated for the year 2030 by category, and the associated parking demand.

Table 4. Town-wide Parking Demand Estimates for Additional Future Retail

| Land Use Description ¹ | Additional Demand by 2030 (1,000 sf GFA) ¹ | ITE Parking Generation Category | Weekday Parking Rates (Avg) | Generated Parking (Weekday) |
|---|---|--|-----------------------------|-----------------------------|
| Motor Vehicle and Parts Dealers | 10 | 843 - Automobile Parts Sales | 1.7 | 17 |
| Home Furnishings and Appliance Stores | 9 | 890 - Furniture Store | 0.48 | 4 |
| Building Material/Garden Equipment and Supplies | 8 | 812 – Building Material and Lumber Store | 0.57 | 5 |
| Food and Beverage Stores | 38 | 850 - Supermarket | 4.59 | 174 |
| Gasoline Stations | 3 | 960 - Convenience Market/ Gas Station | 8.11 | 24 |
| Clothing and Clothing Accessories Stores | 11 | 876 - Apparel Store | 1.13 | 12 |
| General Merchandise Stores | 13 | 814 - Variety Store | 1.13 | 15 |
| Food Services and Drinking Places | 21 | 930 - Fast Casual Restaurant | 9.93 | 209 |
| Other Retail | 26 | 814 - Variety Store | 1.13 | 29 |
| Total | 139 | | | 490 |

Notes: 1. Source: Town of Paradise Commercial Market Analysis (Economic & Planning Systems, Inc., 2022)

The Town of Paradise is expected to generate demand for approximately 139,000 sf of additional retail space by the year 2030 (Town-wide), generating the need for approximately 490 parking spaces. Some portion of this retail growth may occur in the downtown area within the approximately 73,000 sf (**Table 3**) that was vacant in the downtown area prior to the Camp Fire.

As demand grows for events such as *Party in the Park*, additional parking may be beneficial. The additional on-street parking in the *Almond Street Multi-Modal Improvements and Gap Closure Complex* projects will provide additional parking to serve this and similar events.



5. Off-Street Parking Policies and Recommendations

Current Code

The Town of Paradise municipal code includes the following excerpts identifying required off-street parking supply:

- ▶ *17.38.300 – Schedule of off-street parking requirements:* describes the procedure for determining the required number of required off-street parking spaces based on land use and size.
- ▶ *17.38.400 – Parking for compact cars:* describes policy for number of spaces and location of compact vehicle spaces.
- ▶ *17.38.500 – Off-site or remote parking:* describes the policy for utilizing a remote site for a portion of the parking based on the location of the site and remote lot, site characteristics, and pedestrian access.
- ▶ *17.38.600 – Parking for mixed use developments:* describes potential adjustments in the total parking requirement for separate land uses located on the same site, or for separate uses located on adjacent sites and served by a common parking facility.
- ▶ *17.38.700 – Handicapped and/or disabled facilities:* describes the policy for accommodating handicap parking.

Off-Street Parking Recommendations

The following is recommended regarding the Town's parking policy(s):

- ▶ It is recommended the Town continues to require new developments provide the minimum parking space requirements as set forth in section 17.38.1000 on-site or in a designated off-site lot. On-street parking adjacent to the site typically is not relied upon to serve commercial parking supply needs. Exceptions may be considered for low parking intensity development and/or if lot sizes prohibit the required on-site parking.
- ▶ To encourage economic development, it is recommended the Town supplement downtown with additional parking lots as possible and allow shared use as appropriate to contribute towards new development parking requirements.
- ▶ Off-site parking facilities should be designed to connect to pedestrian and multimodal facilities. The *Paradise Active Transportation Plan* as part of the *TMP*, shows the existing and planned pedestrian and multimodal facilities in the downtown area.

6. On-Street Parking Policies and Recommendations

Time-Restricted or Paid Parking Considerations

Time-restricted parking (typically two hours) can increase parking turnover in locations where long-duration parking is found to impact business operations. When not timed appropriately, time-restricted parking can cause patron frustration and requires enforcement by City representatives. Time-restricted parking strategies can be deployed along retail corridors as the need arises for increased turnover. Paid parking can be used for both off- and on-street parking and can generate revenue for reinvestment into the collection area and increase turnover. However, paid parking may be viewed negatively by visitors, and requires an upfront capital investment in fee collection devices/meters, and on-going maintenance and enforcement costs.



On-Street Parking Recommendations

The following recommendations are presented for potential inclusion in Town on-street parking policy(s):

- ▶ Avoid designating any on-street parking space(s) for a specific entity (business, residence, etc.).
- ▶ On-street parking may be provided where it can be safely accommodated and adjacent to pedestrian facilities.
- ▶ Provide on-street parking within the downtown area bounded by Skyway, Pearson Road, Black Olive Drive, and Elliott Road to support business patronage and visits.
- ▶ It is recommended to start with no restrictions and to only designate time-restricted or paid parking if the need arises due to lack of turnover or inadequate parking supply.

7. Loading Zones

Current Code

The Town of Paradise municipal code includes adequate verbiage regarding loading zones including:

- ▶ *10.04.020 - Loading zones—Establishment.*
 - B. Whenever the town council determines upon the basis of a traffic engineering investigation that loading zones, passenger loading zones, or bus loading zones are necessary on any highway or portion thereof, the council shall by resolution direct the town manager to place signs or curb markings as provided in [Section 10.04.060](#) on such highway or portion thereof.*
- ▶ *10.04.030 - Loading zones—Effect.*
 - A. Permission granted in this chapter to stop or stand a vehicle for purposes of loading or unloading freight shall apply only to commercial vehicles and shall not extend beyond the time necessary therefor and in no event for more than twenty minutes.*
 - B. The loading or unloading of freight shall apply only to commercial deliveries, the delivery or pickup of express and parcel post packages, and United States mail.*
 - C. Permission granted in this chapter to stop or park for purposes of loading or unloading passengers shall include the loading or unloading of personal baggage but shall not extend beyond the time necessary therefor and in no event for more than three minutes.*
 - D. Within the total time limits specified in this section, the provisions of this section shall be enforced so as to accommodate necessary and reasonable loading or unloading, but without permitting abuse of the privileges granted by this chapter. (Ord. [16 §1\(J\)](#)(part), 1980: county code §14-43)*
- ▶ *17.38.800 - Off-street loading*
 - A. Each off-street loading space required by this title shall be of sufficient size to park commercial vehicles loading and unloading merchandise and materials on the property on which a space is located, together with such additional area which the town engineer determines is necessary to safely maneuver a vehicle between the loading space and any public right-of-way or any road, street or alley adjoining the property.*



- B. *Private off-street loading space for the handling of goods, materials and equipment shall be provided as follows:*
1. *Buildings fifteen thousand (15,000) square feet or greater of gross floor area (including building conversions): one off-street loading space, plus one additional space for each additional thirty thousand (30,000) square feet of gross floor area.*
 2. *Buildings less than fifteen thousand (15,000) square feet or greater of gross floor area shall not be required to install an off-street loading space.*
- (Ord. No. 524, § 3, 8-7-2012; Ord. 264 §2(part), 1995; Ord. 214 §2(part), 1992)

Loading Zone Recommendations

The following recommendations are provided regarding loading zones:

- ▶ The Paradise municipal code adequately addresses the designation of loading zones. The Town should continue to evaluate the need for commercial and/or passenger loading zones during site plan review, consistent with the established code. When possible, consolidated loading zones serving multiple businesses should be used if the businesses are closely spaced, provided that adequate loading zones for all are provided. Given the geographic layout of businesses, consolidated loading zones may not be practical along most downtown corridors.
- ▶ Businesses expected to generate notable drop-off/pick-up traffic are encouraged to provide passenger loading zones and/or pick up areas for ride hailing services (Uber, Lyft, etc.). This should be considered for developments such as high-density housing, hotels, some medical facilities, etc. to provide a safe space out of the flow of traffic for passenger loading.

8. Parklets

Parklets can reduce on-street parking and re-purpose the area as an expanded sidewalk and outdoor seating area. Parklets are defined by the National Association of City Transportation Officials, Urban Street Design Guide as “...public seating platforms that convert curbside parking spaces into vibrant community spaces. Also known as street seats or curbside seating, parklets are the product of a partnership between the city and local businesses, residents, or neighborhood associations.

Most parklets have a distinctive design that incorporates seating, greenery, and/or bike racks and accommodate unmet demand for public space on thriving neighborhood retail streets or commercial areas.”¹



Source: NACTO.org

Exhibit 5. Parklets, also known as curbside seating, increase public space on retail streets or commercial areas.

¹ <https://nacto.org/publication/urban-street-design-guide/interim-design-strategies/parklets/>



Parklets have the potential to enhance commercial activity and to help create a vibrant downtown area in Paradise. These areas could create a useable outdoor space for businesses or be available for public use. Parklets are typically only utilized on low-speed roads, with a maximum post speed limit ranging between 25 and 30 miles per hour. Further detail on parklet applications, business/agency partnerships, design requirements, and safety considerations are found on the *National Association of City Transportation Officials Urban Street Design Guide*.

Parklet Recommendations

- ▶ Parklets are not recommended on primary roadways or evacuation routes such as Skyway, Pearson Road, or Elliott Road where high speeds and traffic volumes pose a safety issue and vertical obstructions limit flexibility on evacuation routes.
- ▶ Parklets may be considered on low speed, low volume roadways on a case-by-case basis if the surrounding commercial development supports the implementation, if the loss of on-street parking supply is acceptable, and if construction does not impact an evacuation route.

9. Key Findings and Recommendations

- ▶ Existing parking supply in downtown Paradise is sufficient for current post-fire demand.
- ▶ Through the two funded capital projects, the Town plans to add approximately 141 on-street parking spaces downtown, which will support future economic development from current (post-fire) development levels.
- ▶ The analysis does not identify the need for additional on-street parking; however, the Town should continue to look for opportunities to increase on-street parking or provide supplemental parking lots. Additional parking will encourage economic development and will be useful for downtown events which often require large parking supplies for a short period of time.
- ▶ It is recommended the Town of Paradise update the municipal code to include language requiring:
 - » New developments should provide the minimum parking space requirements on-site or in a designated off-site lot. The Town should avoid designating on-street parking space(s) for commercial purposes. Exceptions may be considered for low parking intensity development and/or if lot sizes prohibit the required on-site parking.
 - » During site plan review, the Town should consider the need for commercial and passenger loading zones as applicable.
- ▶ Time-restricted or paid parking should not be implemented unless the need arises due to lack of turnover or inadequate parking supply.

