



**City of St. Helena
Active Transportation and Sustainability
Committee
Regular Meeting
Public Works Conference Room, 1572
Railroad Ave., St. Helena
Wednesday, December 11, 2019 @ 5:00 PM**

PLEASE NOTE: Any person who wishes to speak regarding an item on the agenda or make a comment under the "Oral Communication" portion of the agenda may do so, but please observe the time limit of four minutes. Members of the public and other parties are welcome to email their comments to the Staff Liaison Preya Nixon at pnixon@cityofsthelena.org

Page

1. CALL TO ORDER
2. ROLL CALL
Committee Chair: Pam Smithers
Vice Chair: Glenn Smith
Members: Erin Dempsey, Denise Henquet Sprengers and Tom Vence
City Council Member Liaison: Geoff Ellsworth
Staff Liaison: Erica Ahmann Smithies, PE Public Works Director and City Engineer
3. PUBLIC FORUM:
An opportunity for the public to directly address the Committee on items of interest to the public that are not listed on the agenda. Any person addressing the Committee should provide his or her name and address, and limit comments to three minutes. **Because of restrictions imposed by the Brown Act, the Committee may not engage in substantive discussion, nor take action on matters not described on the agenda.**
4. REPORTS BY STAFF AND COMMITTEE:
Reports by staff and/or committee on items of general interest. ***Brief questions for clarification may be posed and answered, and Committee may request that items be placed on a future agenda. Except under certain circumstances, the Brown Act prohibits any other discussion or action by the Active Transportation & Sustainability Committee.***
 - 4.1. Water Bottle Filling Station Update-Information Only
Prepared By: Erica Ahmann Smithies, Public Works Director and City Engineer
5. CONSENT CALENDAR:
Members of the Active Transportation Committee or the public may ask that any items be considered individually for purposes of considering alternative action, for extended discussion, or for public comment. Unless that is done, on motion may be used to adopt all recommendation actions.
 - 5.1. Consideration and proposed approval of the Active Transportation and Sustainability Committee Meeting Minutes of November 6, 2019
Prepared By: Erica Ahmann Smithies, Public Works Director and City Engineer
[11-6-19 regular meeting minutes ATSC](#)

3 - 4

6. SCHEDULED MATTERS:

- 6.1. Consideration and proposed recommendation to cancel the January 8, 2020 ATSC meeting and to reschedule to a Special Meeting on January 15, 2020.
Prepared By: Preya Nixon, Asst. to the City Manager
- 6.2. Receive presentation on Open Space and Trails – information only
Prepared By: Council Member David Knudsen
- 6.3. Sustainability Measures- Discussion only (Tom Vence and Glenn Smith)
- 6.4. Main Street Crossing Study-Presentation on Updated Recommendations to the September 2019 Main Street Crossing Study-Information Only (Jeff Farmer) 5 - 14
[Main Street Crossings Report - December 2019](#)
- 6.5. Main Street Crossing Study-Consideration and Request for formation of ATSC subcommittee to finalize, prioritize, and price the recommendations and discussion on evaluation metrics (Jeff Farmer) 15 - 24
[Main Street Crossings Report - December 2019](#)
- 6.6. Resources List-Information Only 25 - 109
[Vision 2040 St. Helena Section Only](#)
[2019-10-10 Bike Plan St. Helena Project Page](#)
[Napa County Pedestrian Master Plan St. Helena Section Only](#)
[St. Helena General Plan-Circulation Section](#)
[St. Helena General Plan-Climate Change Section](#)

7. ADJOURNMENT

The next regular Active Transportation and Sustainability Committee meeting is scheduled for January 8, 2020 at 5:00 pm, Public Works Conference Room, 1572 Railroad Avenue, St. Helena.

This agenda was posted at City Hall, 1480 Main Street and the Public Works Conference Room, 1572 Railroad Avenue, St. Helena on December 6, 2019.

Erica Ahmann Smithies, PE Public Works Director and City Engineer

In compliance with the Americans with Disabilities Act, if you need special assistance to participate in the meeting, please contact City Hall at (707) 967-2792. Notification 48 hours prior to the meeting will enable the City to make reasonable arrangements to ensure accessibility to this meeting (28 CFR35.102-35.104 ADA Title II). However, City staff will attempt to assist at any time with accessibility.

Committee Members:

Pam Smithers - Chair
Glenn Smith - Vice Chair
Member – Jeff Farmer
Member – Tom Vence
Member - Denise Henquet Sprengers
Alternate Member – Erin Dempsey
Alternate Member – Madelyn Chandler
City Council Member Liaison – Geoff Ellsworth

DRAFT MINUTES

ST. HELENA ACTIVE TRANSPORTATION & SUSTAINABILITY COMMITTEE

City Hall Conference Room

1480 Main Street, St. Helena

Regular Meeting, Wednesday November 6, 2019 at 5:00 PM

1. CALL TO ORDER @ 5:01PM

2. ROLL CALL

Present: Pam Smithers, Glenn Smith, Jeff Farmer, Denise Henquet, Madelyn Chandler, Jeff Farmer

Council Member: Geoff Ellsworth

Staff Present: Erica Ahmann Smithies, P.E., Martin Beltran, Edrees Argand

3. PUBLIC FORUM:

4. REPORTS BY STAFF AND COMMITTEE:

5. CONSENT CALENDAR

5.1 Approval of the meeting minutes from September 11, 2019 Regular Meeting

The minutes were adopted as presented

Motion: Glenn Smith

Second: Jeff Farmer

Vote: 5-0

6. SCHEDULED MATTERS

6.1 Consideration and proposed recommendation for the Spring Street Bike Improvements and potential to eliminate parking in order to accommodate Class II/III bike facilities

Motion: Adopt with the amendment of the following:

1. 2- 9' traffic lanes, 2-5' bike lanes, and eliminate parking in the eastbound direction
2. Combination Class II/Class III (Sharrows), and eliminate parking in the eastbound direction
3. Class III bike route (Sharrows) in both directions

Motion: Pam Smithers

Second: Madelyn Chandler

Vote: 4 Yes
1 no

6.2 Consideration and proposed recommendation for opting 100% in to Marin Clean Energy

Motion: Tom Vance
Second: Jeff Farmer
Vote: 5-0

7.0 ADJOURNMENT:

Motion to adjourn was approved at 7:35 p.m.

Motion: Jeff Farmer
Second: Tom Vance
Vote: 4-0

The next ATSC regular meeting is scheduled for Wednesday, December 6, 2019 at the Public Works Conference Room, at 5:00pm.

APPROVED:

Chair, Pam Smithers

ATTEST:

Staff Liaison, Erica Ahmann Smithies

Main Street Crossings Study September, 2019; updated December, 2019

Preamble

This is an update to the Main Street Crossing Study first presented to the ATSC in September, 2019. The updates are:

- One additional recommendation
- Recommendations cross-referenced to three previously approved plans.
- A new map with the addition of bike routes from the St. Helena Bicycle Plan segment of the Napa County Bicycle Plan

What's in this package

Project Description

Summary Observations

- General
- Detailed

Recommendations (Updated)

Recommendations Cross Referenced to three approved plans (New)

- Napa County Pedestrian Master Plan
- Napa County Bicycle Plan
- Main Street California (Caltrans)

Maps (Main Street From **Chaix Lane** to **Deer Park Road**)

- Map 1: Missing sidewalks
- Map 2: Bus stop locations
- Map 3: Crosswalks and Intersection controllable
- *Map 4: Bike Routes overlaid on Map 3 (New)*

**Project: Main Street Intersections
September, 2019 (Updated December, 2019)**

Reference

Work with Caltrans/Staff to improve bicycle and pedestrian crossings on Highway 29 (2019 ATSC work plan)

Purpose

To assess all public street intersections with Main Street (Hwy 29) for their awareness and sensitivity to all modes of transportation including, but not limited to, autos, trucks, bicycles, and pedestrians of all levels of mobility. In addition, the location and quality of the bus stops was examined for accessibility and comfort.

Geographical Scope

The city boundary runs through Chaix Lane in the south and ends just before Deer Park Road in the north. Chaix Lane is a private road so it was not included in this study. All public intersections north of Chaix and south of Deer Park were included.

It is helpful to view Main Street as three distinct parts. The **Southern segment** bounded by Chaix Lane to the Sulphur Creek bridge, the **Downtown segment** from Mitchell to Pine, and the **Northern segment** from Pine to Deer Park Road.

**Summary Observations
(Refer to attached maps)**

General:

- 22 intersections; five stop lights; only three intersections cross both sides of Main
- It is legal to cross Main outside of designated crosswalks
- No bicycle lanes anywhere and no intersections that respond to bicycle presence
- ADA ramps exist in all crosswalks; some are pretty old
- Line Of Site (LOS) issues exist in a few uncontrolled intersections
- Four intersections are really driveways
- Many intersections are narrow which causes turning trucks to slow down
- All crosswalks are the traditional two white lines except the hatched intersection at Charter Oak
- There is no sense of entering St. Helena other than small signs

Detail:

- **Pope/Mitchell** offset pair acts as one intersection. The Wells Fargo entrance on **Mitchell** causes back ups on Main.
- The area between **Pratt and Deer Park** is a not accommodating for pedestrians or bicycles. No amenities other than the **Tree Tunnel Path** which is in poor condition. Bicycles tend to use the **narrow shoulders of Main Street** through the tunnel. There is very little maneuvering room for a bicycle to get off the road in the tunnel if it were necessary.
- From the **Tree Tunnel to Madrona** there is now a speed display at Alcobas to alert traffic. The crosswalks are not very visible to traffic. Risk is raised for pedestrians crossing at **Pratt, Elmhurst, and Crinella**.
- Pedestrians walking across **Spring Street and then across Main** (or Main then Spring) delay vehicular traffic.
- The crossings at **Charter Oak and Pope Street** have been identified as possible crossing guard locations during school transit hours.
- Trees, business signs, and parked vehicles limit line of sight at **Vidovich , El Bonita, Vintage, Grayson, and Hunt**.
- No bicycle lanes anywhere; no intersections respond to bicycle presence. However shoulders are wide **south of Grayson and west side of Main from the Tree Tunnel to about Elmhurst**. Are Class II bicycle lanes possible here?
- There are no sidewalks on the east side of Main **south of Charter Oak** and none on the west side **south of the High School** except in front of Zumwalt Ford; there is a dirt path ending at El Bonita.
- There are no crosswalks between the **southern City limit and Charter Oak**.
- Some longer trucks take a long time to turn or have to back up and try again causing traffic to back up. Example: Safeway trucks turning at **Hunt**. Trucks stopping for gas at **Chevron station at Adams**.
- Four intersections are basically driveways: **North and South Alexander Ct and North and South St. Andrews Ct**
- Only the crosswalk at **Charter Oak** is hatched; the rest are two parallel white lines.
- **Bus stops**. Some have nothing, some only have seats, some are sheltered.

Main Street Crossing Study
ATSC, December 2019

This chart takes the recommendations from the Main Street Crossings Study and cross references them in the three other approved planning documents.

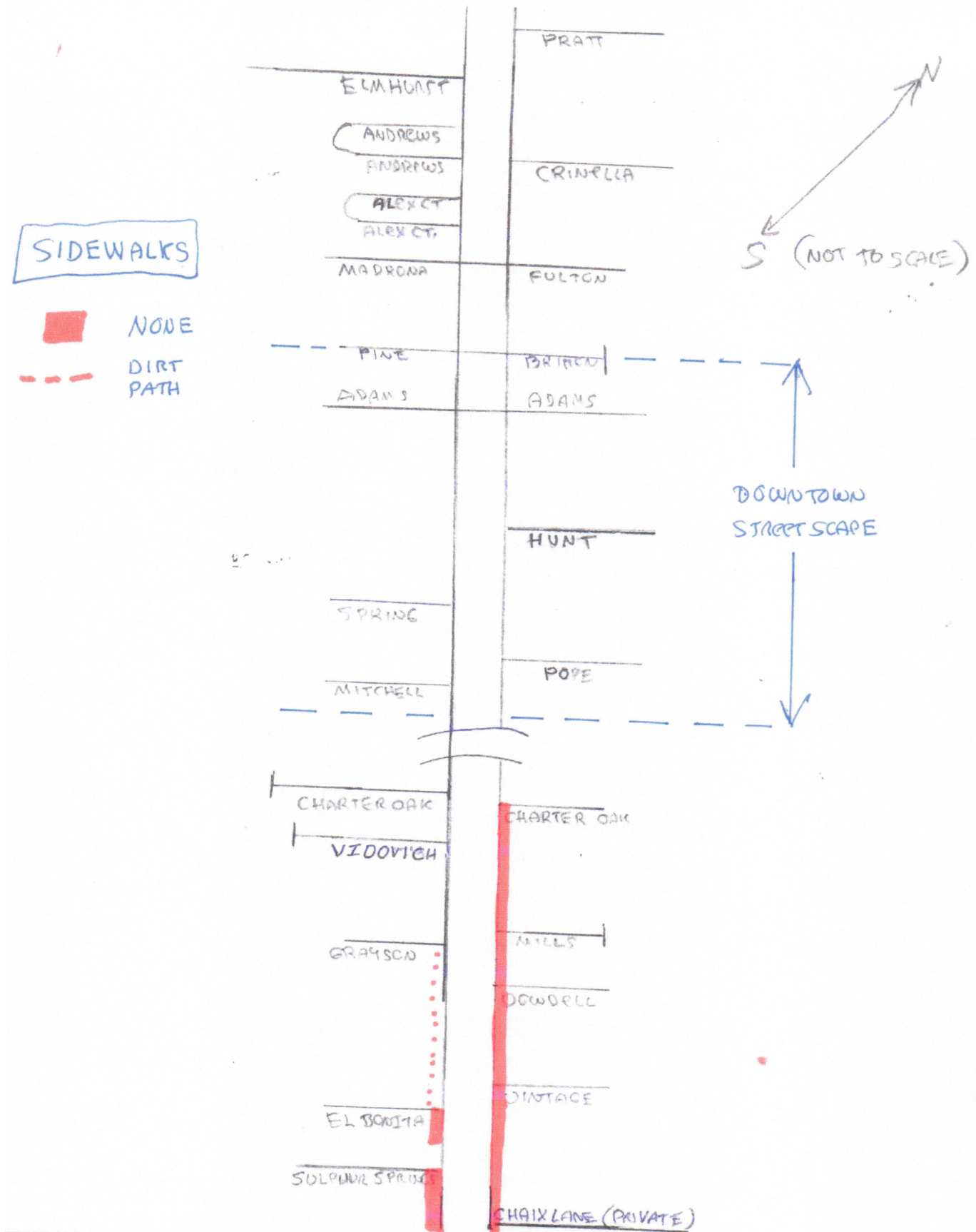
Doc:	Main St. Crossings Study	SH Ped Plan ¹	County Bike Plan ²	Main Street, California ³
Source:	ATSC	Saint Helena	Napa County	Caltrans
	Use more visible crosswalk designs throughout the city especially in uncontrolled intersections. Add a pedestrian controllable crosswalk in the Northern segment like the one at Charter Oak. Add crosswalks south of Charter Oak where appropriate.	Table SH-2 Exhibit SH-5 (Heat Map) Table SH-5: Project SH-5: Grayson to Dowdell Sidewalk Project SH-7: Pope sidewalk activation (??) Project SH-8: Charter Oak/Vidovich sidewalk enhancements Project SH-11: Sidewalk enhancements (East? West side?)		Pages 43, 48, 50
	Investigate the feasibility of Crossing islands, Refuge islands or other markers that denote the city boundary. These should be dramatic that proclaim one is entering the City. They should start at the Southern segment city limit and the Northern segment city limit and continue toward the Downtown area.	Table SH-3, Exhibit SH-3 Exhibit SH-5 (Heat Map) Table SH-5 (Project SH-2: Raised Median)		

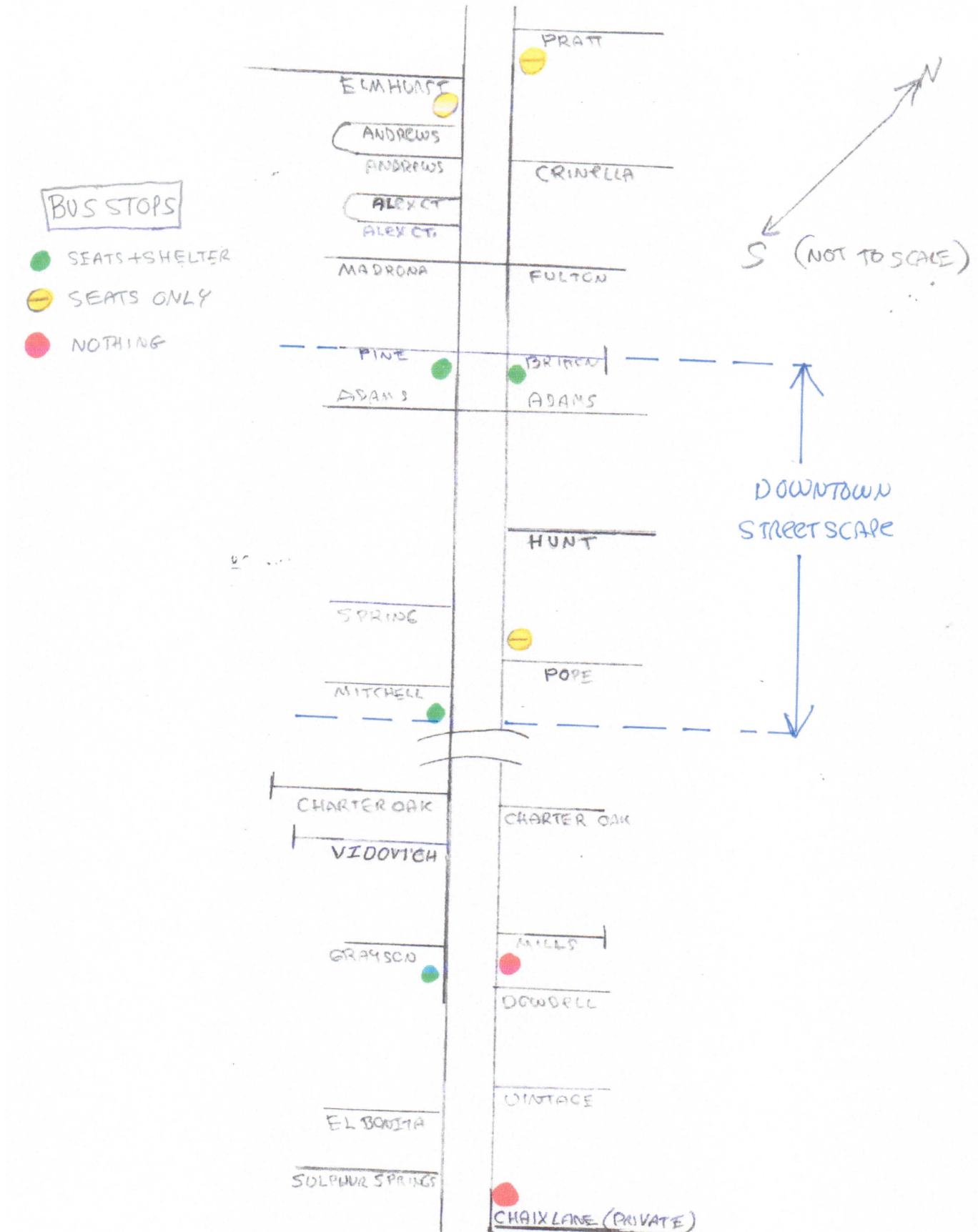
	Assess feasibility of implementing a crossing guard program or technical features to enhance the safety of key intersections during school transit hours (reference: Bicycle Safety & Education Back to School Program - Aug 7, 2019 ATSC meeting)	Table SH-3, Exhibit SH-3 Exhibit SH-5 (Heat Map) Table SH-6: SRTS program	Table SH.4: Safe Routes To School and Safety Education	
	Upgrade ADA crossings where needed	ADA Transition Plan (Table SH-1)		Pages 13, 66
	Upgrade all bus stop locations to provide shelter and seating	Sidewalk/Street Tree Ordinance (Table SH-1)		Pages 15, 71, 75
	Upgrade signalized intersections to respond to bicycle presence		Pg. 103 – Collision Analysis: Main Street Pg. 105 - signals	Pages 14, 55, 58-60
	Add shared lane markings (sharrows) and/or Class II bicycle lanes		Pg. 106 – Main St Sharrows	Pages 58, 59
	Upgrade the Tree Tunnel Path to be usable.		Pg. 107 – Vine Trail	
	Complete crosswalks on all legs at Grayson.	Table SH-2 Exhibit SH-5 (Heat Map) Table SH-5, Project T0-1, FUNDED		
	Fix the crumbling sidewalk at Alexander Court (north)	ADA Transition Plan (Table SH-1) Table SH-6: Maintenance		
Added since Sept report	Extend sidewalks on east side of Main to Dowdell	ADA Transition Plan (Table SH-1) Project SH-11: Sidewalk enhancements		

¹ Chapter 3 of the *Napa County Pedestrian Master Plan* (August, 2016)

² *Napa County Bicycle Plan* (October, 2019)

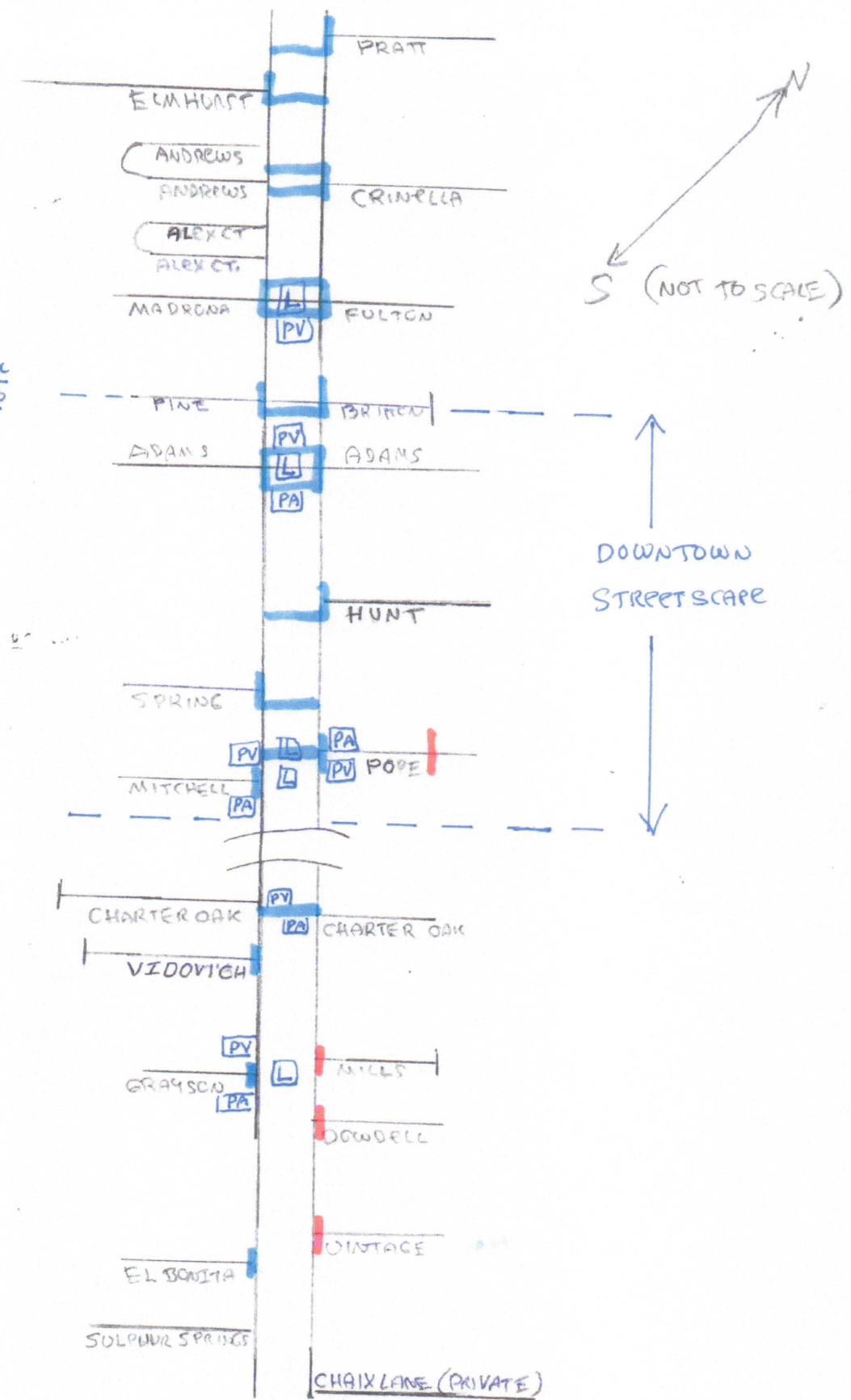
³ *Main Street, California* (Caltrans, 2013)

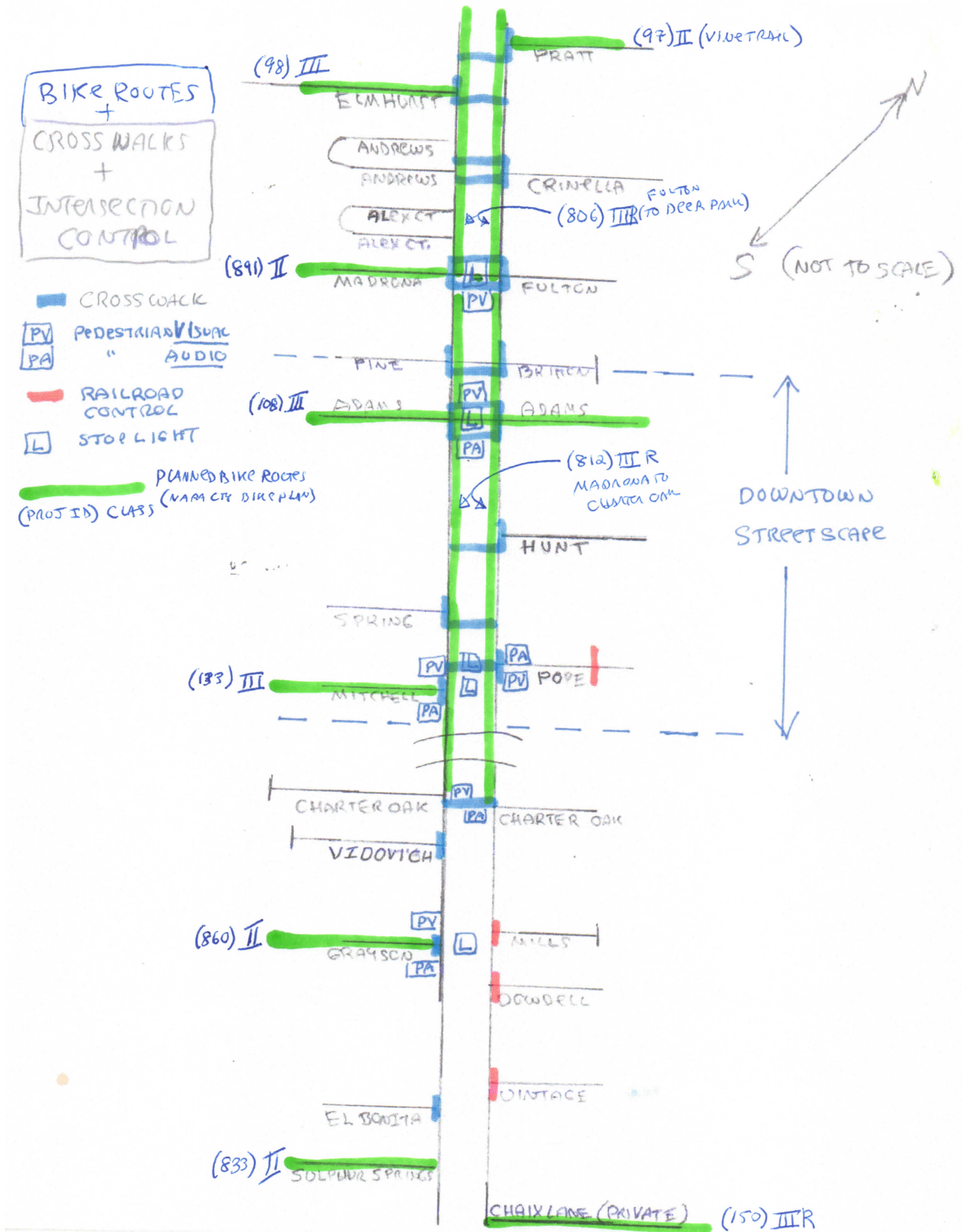




CROSS WALKS
+
INTERSECTION
CONTROL

- CROSS WALK
- PV PEDESTRIAN VISUAL
- PA " AUDIO
- RAILROAD
CONTROL
- L STOP LIGHT





Proposed Next Steps

- Form an ATSC subcommittee to review, prioritize, and price the recommendations in conjunction with Public Works
- Connect with the Downtown Streetscape Committee
- Return to the ATSC to for consideration and approval

Main Street Crossings Study September, 2019; updated December, 2019

Preamble

This is an update to the Main Street Crossing Study first presented to the ATSC in September, 2019. The updates are:

- One additional recommendation
- Recommendations cross-referenced to three previously approved plans.
- A new map with the addition of bike routes from the St. Helena Bicycle Plan segment of the Napa County Bicycle Plan

What's in this package

Project Description

Summary Observations

- General
- Detailed

Recommendations (Updated)

Recommendations Cross Referenced to three approved plans (New)

- Napa County Pedestrian Master Plan
- Napa County Bicycle Plan
- Main Street California (Caltrans)

Maps (Main Street From **Chaix Lane** to **Deer Park Road**)

- Map 1: Missing sidewalks
- Map 2: Bus stop locations
- Map 3: Crosswalks and Intersection controllable
- *Map 4: Bike Routes overlaid on Map 3 (New)*

**Project: Main Street Intersections
September, 2019 (Updated December, 2019)**

Reference

Work with Caltrans/Staff to improve bicycle and pedestrian crossings on Highway 29 (2019 ATSC work plan)

Purpose

To assess all public street intersections with Main Street (Hwy 29) for their awareness and sensitivity to all modes of transportation including, but not limited to, autos, trucks, bicycles, and pedestrians of all levels of mobility. In addition, the location and quality of the bus stops was examined for accessibility and comfort.

Geographical Scope

The city boundary runs through Chaix Lane in the south and ends just before Deer Park Road in the north. Chaix Lane is a private road so it was not included in this study. All public intersections north of Chaix and south of Deer Park were included.

It is helpful to view Main Street as three distinct parts. The **Southern segment** bounded by Chaix Lane to the Sulphur Creek bridge, the **Downtown segment** from Mitchell to Pine, and the **Northern segment** from Pine to Deer Park Road.

**Summary Observations
(Refer to attached maps)**

General:

- 22 intersections; five stop lights; only three intersections cross both sides of Main
- It is legal to cross Main outside of designated crosswalks
- No bicycle lanes anywhere and no intersections that respond to bicycle presence
- ADA ramps exist in all crosswalks; some are pretty old
- Line Of Site (LOS) issues exist in a few uncontrolled intersections
- Four intersections are really driveways
- Many intersections are narrow which causes turning trucks to slow down
- All crosswalks are the traditional two white lines except the hatched intersection at Charter Oak
- There is no sense of entering St. Helena other than small signs

Detail:

- **Pope/Mitchell** offset pair acts as one intersection. The Wells Fargo entrance on **Mitchell** causes back ups on Main.
- The area between **Pratt and Deer Park** is a not accommodating for pedestrians or bicycles. No amenities other than the **Tree Tunnel Path** which is in poor condition. Bicycles tend to use the **narrow shoulders of Main Street** through the tunnel. There is very little maneuvering room for a bicycle to get off the road in the tunnel if it were necessary.
- From the **Tree Tunnel to Madrona** there is now a speed display at Alcobas to alert traffic. The crosswalks are not very visible to traffic. Risk is raised for pedestrians crossing at **Pratt, Elmhurst, and Crinella**.
- Pedestrians walking across **Spring Street and then across Main** (or Main then Spring) delay vehicular traffic.
- The crossings at **Charter Oak and Pope Street** have been identified as possible crossing guard locations during school transit hours.
- Trees, business signs, and parked vehicles limit line of sight at **Vidovich , El Bonita, Vintage, Grayson, and Hunt**.
- No bicycle lanes anywhere; no intersections respond to bicycle presence. However shoulders are wide **south of Grayson and west side of Main from the Tree Tunnel to about Elmhurst**. Are Class II bicycle lanes possible here?
- There are no sidewalks on the east side of Main **south of Charter Oak** and none on the west side **south of the High School** except in front of Zumwalt Ford; there is a dirt path ending at El Bonita.
- There are no crosswalks between the **southern City limit and Charter Oak**.
- Some longer trucks take a long time to turn or have to back up and try again causing traffic to back up. Example: Safeway trucks turning at **Hunt**. Trucks stopping for gas at **Chevron station at Adams**.
- Four intersections are basically driveways: **North and South Alexander Ct and North and South St. Andrews Ct**
- Only the crosswalk at **Charter Oak** is hatched; the rest are two parallel white lines.
- **Bus stops**. Some have nothing, some only have seats, some are sheltered.

Main Street Crossing Study
ATSC, December 2019

This chart takes the recommendations from the Main Street Crossings Study and cross references them in the three other approved planning documents.

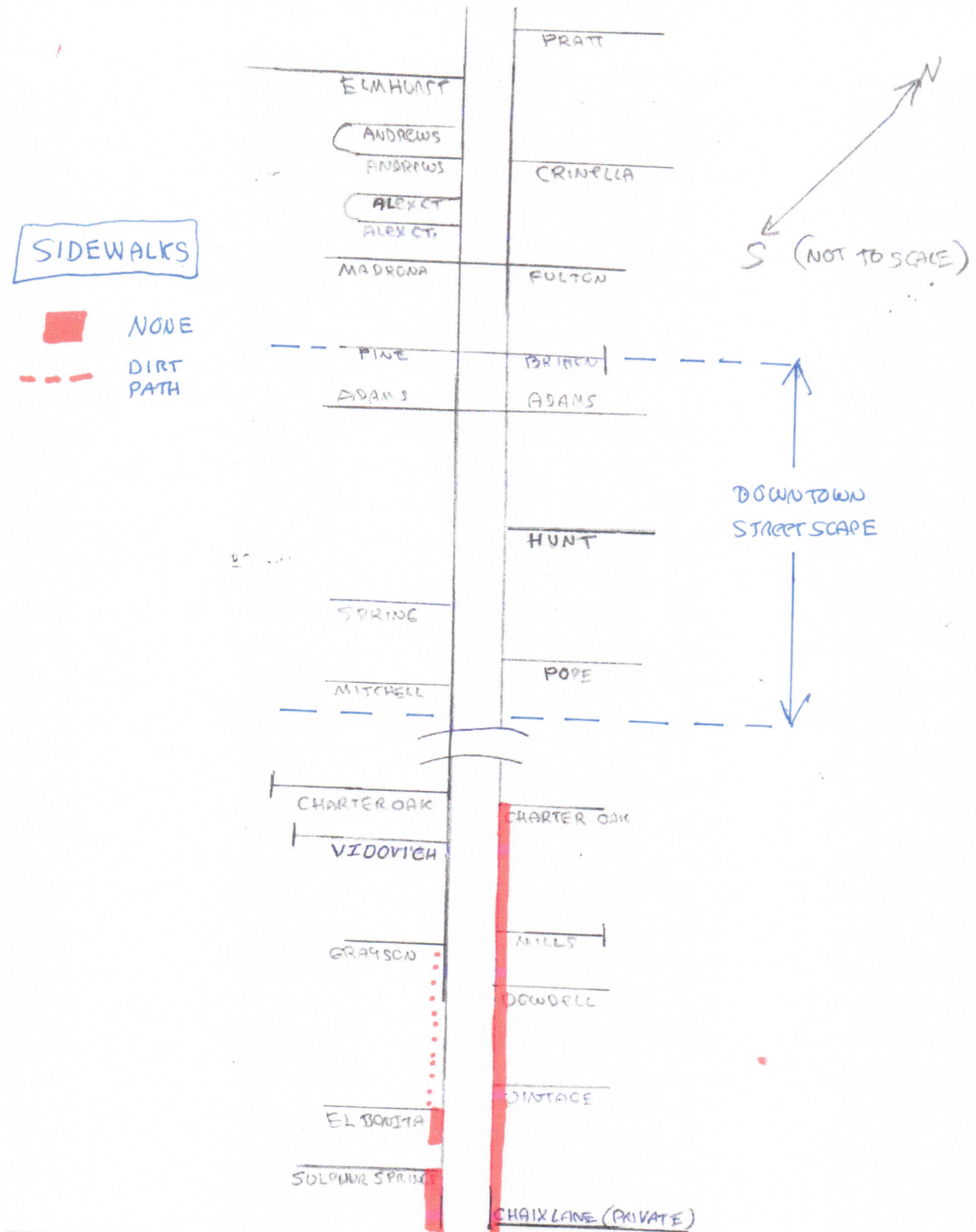
Doc:	Main St. Crossings Study	SH Ped Plan ¹	County Bike Plan ²	Main Street, California ³
Source:	ATSC	Saint Helena	Napa County	Caltrans
	Use more visible crosswalk designs throughout the city especially in uncontrolled intersections. Add a pedestrian controllable crosswalk in the Northern segment like the one at Charter Oak. Add crosswalks south of Charter Oak where appropriate.	Table SH-2 Exhibit SH-5 (Heat Map) Table SH-5: Project SH-5: Grayson to Dowdell Sidewalk Project SH-7: Pope sidewalk activation (??) Project SH-8: Charter Oak/Vidovich sidewalk enhancements Project SH-11: Sidewalk enhancements (East? West side?)		Pages 43, 48, 50
	Investigate the feasibility of Crossing islands, Refuge islands or other markers that denote the city boundary. These should be dramatic that proclaim one is entering the City. They should start at the Southern segment city limit and the Northern segment city limit and continue toward the Downtown area.	Table SH-3, Exhibit SH-3 Exhibit SH-5 (Heat Map) Table SH-5 (Project SH-2: Raised Median)		

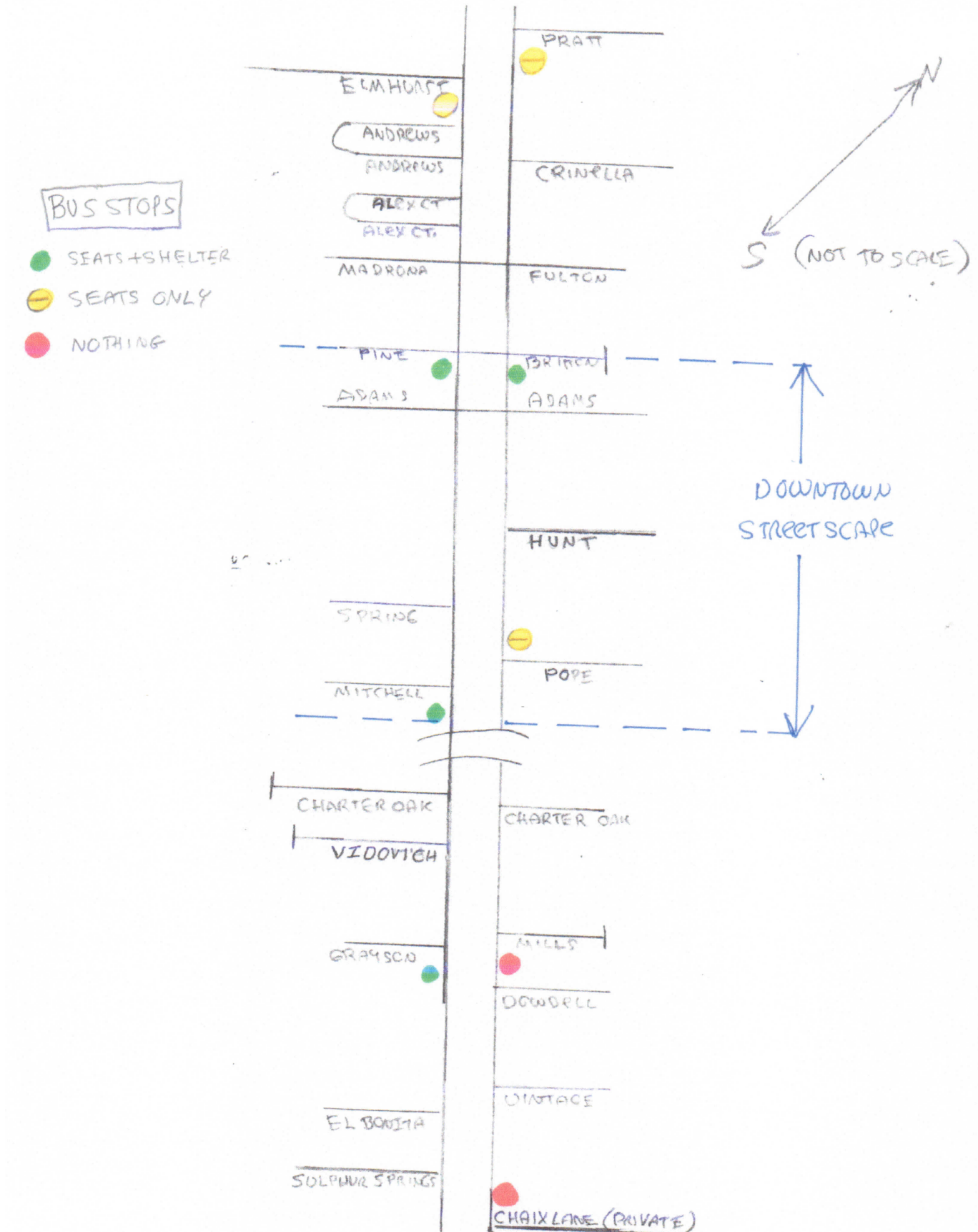
	Assess feasibility of implementing a crossing guard program or technical features to enhance the safety of key intersections during school transit hours (reference: Bicycle Safety & Education Back to School Program - Aug 7, 2019 ATSC meeting)	Table SH-3, Exhibit SH-3 Exhibit SH-5 (Heat Map) Table SH-6: SRTS program	Table SH.4: Safe Routes To School and Safety Education	
	Upgrade ADA crossings where needed	ADA Transition Plan (Table SH-1)		Pages 13, 66
	Upgrade all bus stop locations to provide shelter and seating	Sidewalk/Street Tree Ordinance (Table SH-1)		Pages 15, 71, 75
	Upgrade signalized intersections to respond to bicycle presence		Pg. 103 – Collision Analysis: Main Street Pg. 105 - signals	Pages 14, 55, 58-60
	Add shared lane markings (sharrows) and/or Class II bicycle lanes		Pg. 106 – Main St Sharrows	Pages 58, 59
	Upgrade the Tree Tunnel Path to be usable.		Pg. 107 – Vine Trail	
	Complete crosswalks on all legs at Grayson.	Table SH-2 Exhibit SH-5 (Heat Map) Table SH-5, Project T0-1, FUNDED		
	Fix the crumbling sidewalk at Alexander Court (north)	ADA Transition Plan (Table SH-1) Table SH-6: Maintenance		
Added since Sept report	Extend sidewalks on east side of Main to Dowdell	ADA Transition Plan (Table SH-1) Project SH-11: Sidewalk enhancements		

¹ Chapter 3 of the *Napa County Pedestrian Master Plan* (August, 2016)

² *Napa County Bicycle Plan* (October, 2019)

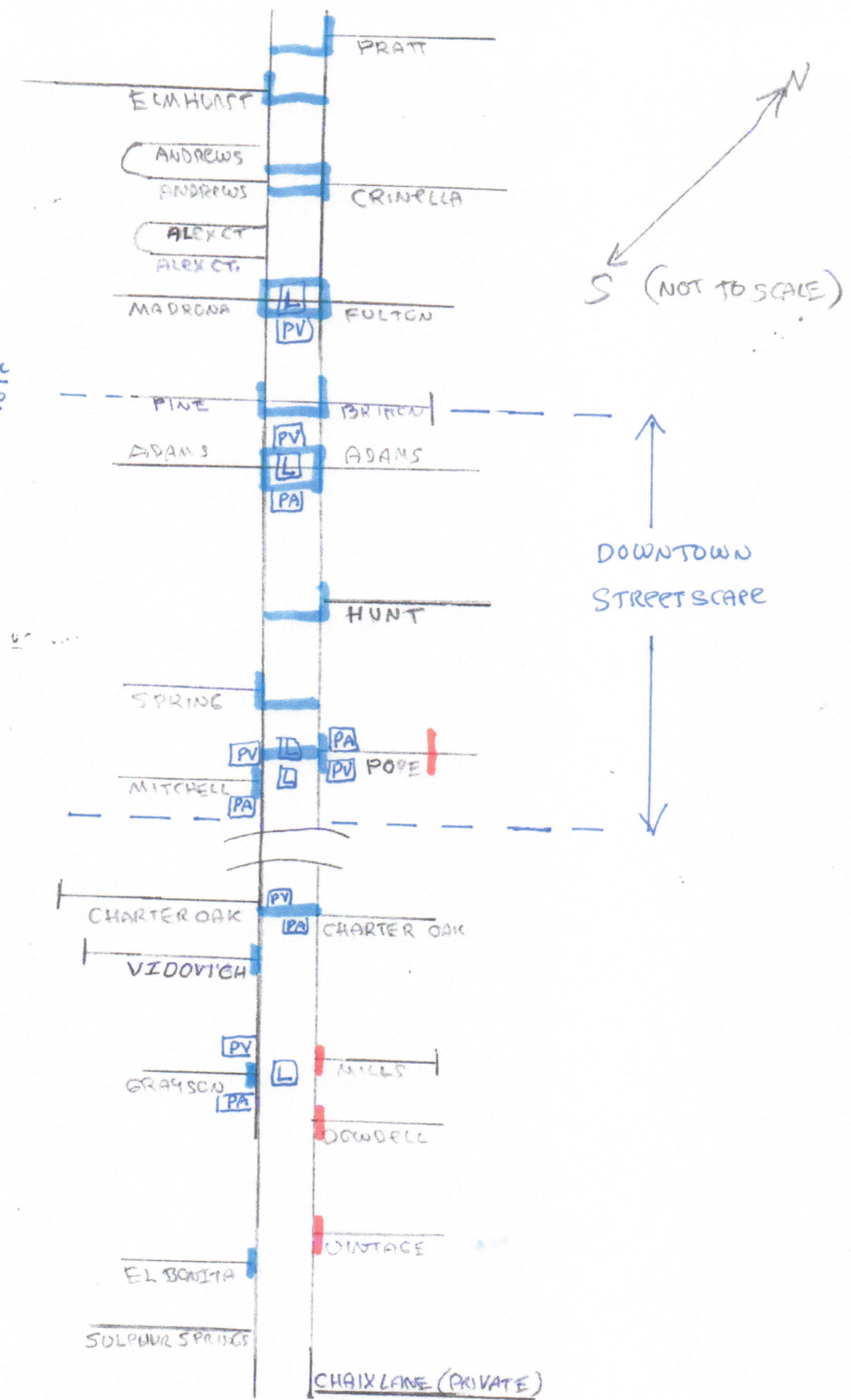
³ *Main Street, California* (Caltrans, 2013)

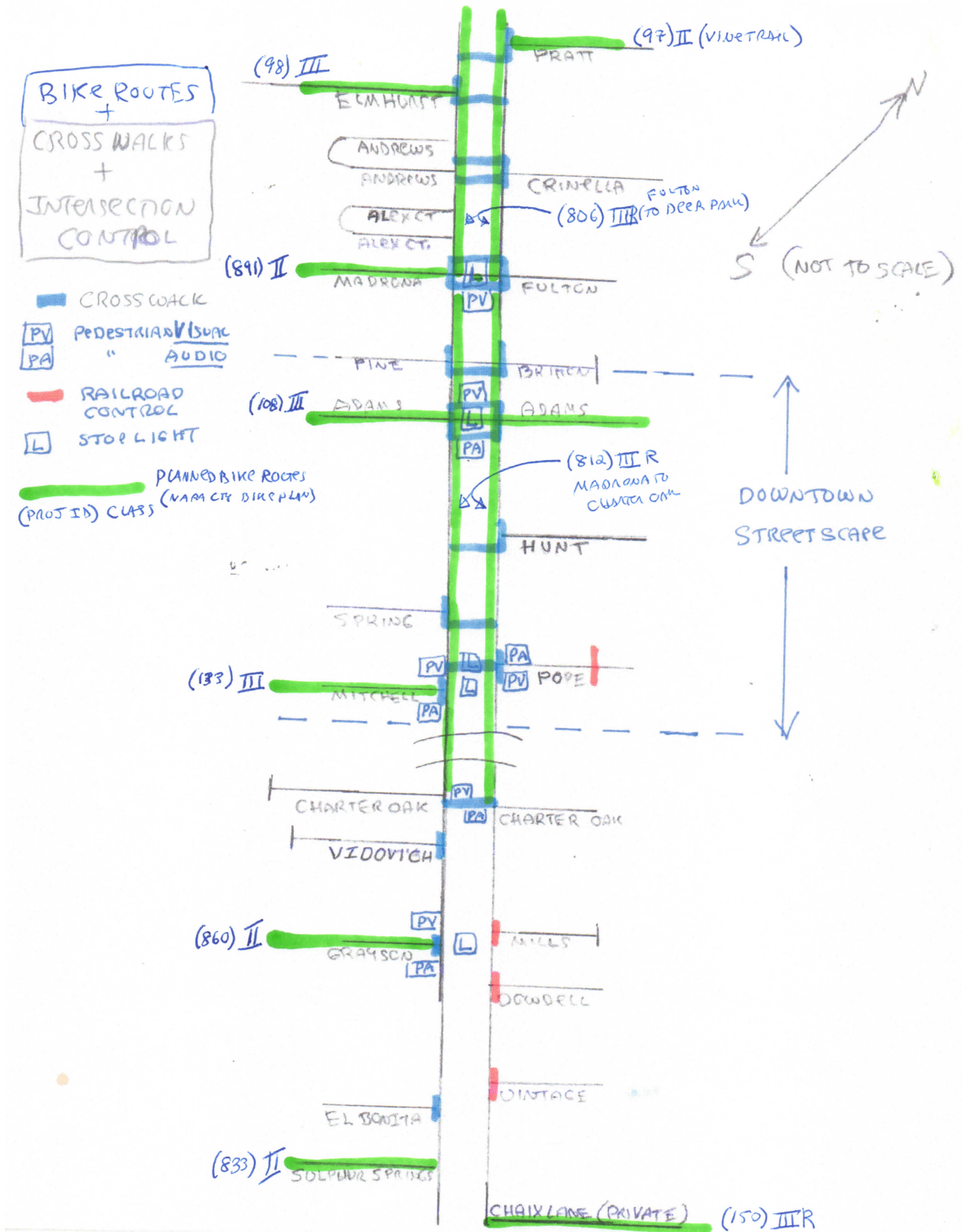




CROSS WALKS
+
INTERSECTION
CONTROL

- CROSS WALK
- PV PEDESTRIAN ~~VISUAL~~ AUDIO
- PA " AUDIO
- RAILROAD
CONTROL
- L STOP LIGHT





Proposed Next Steps

- Form an ATSC subcommittee to review, prioritize, and price the recommendations in conjunction with Public Works
- Connect with the Downtown Streetscape Committee
- Return to the ATSC to for consideration and approval

Napa Countywide Transportation Plan
Project List

No.	Jurisdiction	Project Title	Project Description	Project Location			Mode	Project Phase	Total Cost	Total Committed	Types of funds Committed	Total Need	Start Year	End Year	Included in Plan Bay Area
				Location	Start Point	End Point									
92	NCTPA	New Transit Vehicles (EXPANSION)	Acquisition of new paratransit vehicles, community shuttle buses and VINE buses for service expansion	N/A	-	-	Bus	None	\$27,510,000	\$0	-	\$ 27,510,000	2017	2040	No
93	NCTPA	Transit System Growth (Operating Costs)	Operation costs for the expansion of the transit system	N/A	-	-	Bus	None	\$2,800,000	\$0	-	\$ 2,800,000	2018	2040	No
94	NCTPA	New Shelters and Stop Amenities (EXPANSION)	Improved bus stops throughout Napa County	N/A	-	-	Bus	None	\$4,850,000	\$0	-	\$ 4,850,000	2020	2040	No
95	NCTPA	IT Equipment Upgrades & Replacement Program	Wi-Fi for all buses, Camera System & Real Time signage, Asset Management Database, sales office equipment, taxi scrip automated readers	N/A	-	-	Bus	None	\$480,000	\$0	-	\$ 480,000	2015	2019	No
96	St Helena	Main Street Corridor Improvements	Install traffic calming devices (e.g., bulb outs), upgrade sidewalk, pedestrian lighting, pedestrian furniture, landscaping, bike infrastructure and traffic signal synchronization	Main Street (SR29)	Spring Street	Adams Street	Bike/Ped/Vehicle	PE-CON	\$700,000	\$21,278	Local	\$678,722	2011	2018	No
97	St Helena	Sulphur Creek Class I Bikeway	Construct Class I Bikeway	Sulphur Creek	Sulphur Springs Avenue	Napa River	Bike		\$5,800,000	\$0	-	\$5,800,000	2020	2030	No
98	St Helena	Spring Mountain Road Class I Bikeway	Construct Class I Bikeway	Spring Mountain Road	Lower Reservoir	Spring Mountain Court	Bike		\$1,700,000	\$0	-	\$1,700,000	2020	2030	No
99	St Helena	Oak Avenue Extension	Extend Oak Avenue	Oak Avenue	Charter Oak Avenue	Grayson Avenue	Vehicle		\$1,800,000	\$0	-	\$1,800,000	2020	2025	No
100	St Helena	Starr Avenue Extension	Extend Starr Avenue	Starr Avenue	Hunt Avenue	Adams Street	Vehicle		\$617,000	\$0	-	\$617,000	2025	2030	No
101	St Helena	Adams Street Extension	Extend Adams Street	Adams Street	end	Starr Avenue	Vehicle		\$851,000	\$0	-	\$851,000	2025	2030	No
102	St Helena	New North-South Collector	Extend College Avenue, or Starr Avenue, or Allison Avenue	New	Mills Lane	Pope Street	Vehicle		\$1,900,000	\$0	-	\$1,900,000	2025	2030	No
103	St Helena	Mills Lane Safety Improvements	Improve Mills Lane to two lanes with bike and pedestrian access	Mills Lane	Main Street (SR29)	End	Vehicle		\$3,500,000	\$0	-	\$3,500,000	2025	2030	No
104	St Helena	Napa River Class I Bikeway	Construct Class I Bikeway (River Trail)	Napa River	South City Limit	North City Limit	Bike		\$9,800,000	\$0	-	\$9,800,000	2030	2040	No
105	St Helena	New East-West Collector	Extend Adams Street or Mills Lane	New	End	Silverado Trail	Vehicle		\$2,900,000	\$0	-	\$2,900,000	2035	2040	No
106	St Helena	Fulton Lane Safety Improvements	Improve Fulton Lane to two lanes with bike and pedestrian access	Fulton Lane	Railroad Ave	End	Vehicle		\$2,200,000	\$0	-	\$2,200,000	2035	2040	No
107	Yountville	Oak Circle Parking Improvement	Parking improvements to existing infrastructure	Future Oak Circle Park, near Oak Circle and Vintner Ct	N/A	N/A	Vehicle	Planning, Design, Construction	\$75,000	\$0	-	\$75,000	2015	2018	No
108	Yountville	South Veteran's Park Parking Improvements	Parking improvements to existing infrastructure	At Veteran's Park, Washington St. South of California Dr	N/A	N/A	Vehicle	Planning, Design, Construction	\$175,000	\$0	-	\$175,000	2020	2021	No
109	Yountville	Washington Park Sidewalk Project	Adding sidewalk to the Washington Park Subdivision	Washington Park	East of Washington, North of Forrester Ln	East of Washington, South of Yountville Cross Rd	Pedestrian	Planning, Design, Construction	\$850,000	\$0	-	\$850,000	2022	2023	No
110	Yountville	Yountville Crossroads Bicycle Path & Sidewalk	A full lane bicycle path along Yountville Crossroads	Length of Yountville Crossroads	Yountville Cross Roads and Yount St	Yountville Cross Roads and Stags View Ln	Bike	Planning, Design, Construction	\$1,500,000	\$0	-	\$1,500,000	2030	2031	No
111	Yountville	Future Parking Garage Facility	New parking facility	To be determined	N/A	N/A	Vehicle	Planning, Design, Construction	\$5,500,000	\$0	-	\$5,500,000	2030	2031	No
112	Yountville	Transportation Infrastructure	Extend Yount Mill Road and Yountville Cross Rd, connecting the new development to the Town.	Northeast of Washington and Yountville Cross Rd	Entire Site	Entire Site	Bike/Ped/Vehicle	Planning, Design, Construction	\$2,500,000	\$0	-	\$2,500,000	2030	2035	No
113	Yountville	SR-29 Interchange Project	Construct Interchange at Madison and SR-29	Madison & SR-29	N/A	N/A	Vehicle	Planning, Design, Construction	\$20,000,000	\$0	-	\$20,000,000	2030	2031	No

* Multi-jurisdictional Project
Indicates Constrained List

Table SH.5. Project List

Project ID	Street/Trail Name	Begin	End	Facility Type	Length (Miles)
Measure T Overlap Projects					
<i>Bike Lane (Class II) Projects</i>					
821	S Crane Ave	Grayson Ave	Sulphur Springs Ave	Bike Lane (Class II)	0.45
860	Grayson Ave	Crane Ave	SR 29 (Main St)	Bike Lane (Class II)	0.50
891*	Madrona Ave-Riesling Way	Main St	Sylvaner Ave	Bike Lane (Class II)	1.03
106*	Spring St	White Sulphur Springs Rd at city limit	Oak Ave	Bike Lane (Class II)	0.98
<i>Bike Boulevard (Class III) Projects</i>					
108*	Adams St	Railroad Ave	Allyn Ave	Bike Boulevard (Class III)	0.47
131	Birch Ave	Crane Ave	Valley View St	Bike Boulevard (Class III)	0.15
125	Church St	Hunt Ave	Pope St	Bike Boulevard (Class III)	0.13
127	Edwards St	Hunt Ave	Pope St	Bike Boulevard (Class III)	0.15
126*	Hunt Ave	Church St	Starr Ave	Bike Boulevard (Class III)	0.42
810	McKorkle Ave	Alison Ave	Proposed class I facility 675' west of College Ave	Bike Boulevard (Class III)	0.29
133*	Mitchell Dr	Main St	Crane Ave	Bike Boulevard (Class III)	0.44
116*	Oak Ave	Hillview Pl	Mitchell Dr	Bike Boulevard (Class III)	0.10
<i>Bike Route (Class III) Projects</i>					
856	Spring St	Sylvaner Ave	Sulphur Springs Ave	Bike Route (Class III)	0.18
All Other Projects					
<i>Shared-Use Path (Class I) Projects</i>					
147	Crane Park Path (to La Quinta Way)	Grayson Ave	Kennedy Ct	Shared-Use Path (Class I)	0.50
747	Library Lane Path	Adams St	Vine Trail (along RR corridor)	Shared-Use Path (Class I)	0.13
818	Lower Reservoir Loop Trail	NW city limit	Loop around Lower Reservoir and connect to Spring Mountain Rd	Shared-Use Path (Class I)	1.25
809	McCorkle Ave Path	Grayson Ave	College Ave	Shared-Use Path (Class I)	0.14
144	Mills Ln	SR 29-Main St	Proposed class I facility annex from Starr Ave	Shared-Use Path (Class I)	0.50
93	Napa River Trail	Pope St (Napa River Trail-Wappo Park)	St Helena city limit (Deer Park Rd / Lower Reservoir Trail)	Shared-Use Path (Class I)	1.90

Project ID	Street/Trail Name	Begin	End	Facility Type	Length (Miles)
151	Napa River Trail	St Helena city limit near wastewater treatment plant	SE edge Wappo Park	Shared-Use Path (Class I)	1.14
875	Pope St	Starr Ave	Silverado Trail	Shared-Use Path (Class I)	0.41
146	Starr Ave Path	Hunt Ave	Mills Ln	Shared-Use Path (Class I)	0.68
749	Starr Ave-Adams St-Railroad Ave-Fulton Ln	Hunt Ave	Railroad Ave	Shared-Use Path (Class I)	0.51
105	Sulphur Creek Path	Spring St	Sulphur Springs Ave	Shared-Use Path (Class I)	0.10
140	Sulphur Creek Path	Sulphur Springs Ave	Napa River Trail	Shared-Use Path (Class I)	0.65
96	York Creek Path	Spring Mountain Rd	Vine Trail	Shared-Use Path (Class I)	0.33
<i>Bike Lane (Class II) Projects</i>					
107	Allyn Ave	Spring St	Madrona Ave	Bike Lane (Class II)	0.34
819	Hudson Ave	Madrona Ave	Spring St	Bike Lane (Class II)	0.32
144	Mills Ln	Main St/SR 29	Proposed class I facility annex from Starr Ave	Bike Lane (Class II)	0.50
97	Pratt Ave	Vine Trail	Main St/SR 29	Bike Lane (Class II)	0.26
816	Spring Mtn Rd	Dean York Ln	Madrona Ave	Bike Lane (Class II)	0.39
895	Main St/SR 29	Chaix Ln	Charter Oak Rd	Bike Lane (Class II)	0.02
896	Main St/SR 29	Chaix Ln	Charter Oak Rd	Bike Lane (Class II)	0.21
833	Sulphur Springs Rd	S Crane Ave	Main St/SR 29	Bike Lane (Class II)	0.50
102	Sylvaner Ave	Riesling Way	Spring St	Bike Lane (Class II)	0.30
<i>Bike Boulevard (Class III) Projects</i>					
808	College Ave	Pope St	Proposed class I facility at SE end of College Ave	Bike Boulevard (Class III)	0.18
98	Elmhurst Ave	Spring Mountain Rd	Main St	Bike Boulevard (Class III)	0.23
114	Hillview Pl	Spring Mountain Rd	Oak St	Bike Boulevard (Class III)	0.14
124	Hunt Ave	Railroad Ave	Church St	Bike Boulevard (Class III)	0.02
244	Mariposa Ln	Pope St	McCorkle Ave	Bike Boulevard (Class III)	0.14
129	N Crane Ave	Spring St	Birch St	Bike Boulevard (Class III)	0.23
857	Railroad Ave	Adams St	Hunt Ave	Bike Boulevard (Class III)	0.11
859	Railroad Ave	Fulton Ln	Hunt Ave	Bike Boulevard (Class III)	0.21
820	Valley View St	Spring St	Birch St	Bike Boulevard (Class III)	0.20
<i>Bike Route (Class III) Projects</i>					
150	Chaix Ln	Main St/SR 29	Napa River Trail (proposed)	Bike Route (Class III)	1.07
806	Main St	Fulton Ln	St Helena city limit, Deer Park Rd	Bike Route (Class III)	1.11
812	Main St	Madrona Ave	Charter Oak Ave	Bike Route (Class III)	0.64

Project ID	Street/Trail Name	Begin	End	Facility Type	Length (Miles)
807	Pratt Ave	RR track/Vine Trail at Pratt Ave	Napa River Trail (proposed)	Bike Route (Class III)	0.48
815	Spring Mountain Rd	St Helena city limit (West)	Dean York Ln	Bike Route (Class III)	0.69
103	Sulphur Springs Ave	St Helena city limit	Spring St	Bike Route (Class III)	0.16
149	Sulphur Springs Ave	Sulphur Creek	Main St/SR 29	Bike Route (Class III)	0.93
<i>Vine Trail (varying facility types to be determined by Corridor Study)</i>					
854	Vine Trail	St Helena City Limits (South)	St Helena City Limits (North)	To Be Determined	3.10

* Projects denoted with an asterisk overlap with a jurisdiction-identified Measure T project, but they do not have the same extents: the proposed bicycle network project is either longer or shorter than the Measure T project.

Appendix SH-C: Detailed Project List and Prioritization

ST. HELENA PEDESTRIAN IMPROVEMENT LIST				
ID	Roadway	Limits or Intersection	Recommendations	Infrastructure Category
TIER ZERO (FUNDED OR CONSTRUCTED PROJECTS)				
T0-1 Additions to Planned Projects	Main Street	Main Street at Grayson Avenue (Intersection)	Marked crosswalks on all legs, advanced limit lines, and curb extensions with directional ramps on northwest and southwest corners as part of signal design	Crossing treatments ADA ramps
T0-2 Mitchell Drive Sidewalk	Mitchell Drive	Oak Avenue to St. James Court	Sidewalk on the north side of the street	Sidewalk
TIER ONE				
SH-1 RLS Middle School Sidewalk and Hunt Avenue Improvements	Hillview Place, Spring Mountain Road, and Elmhurst Avenue	Robert Louis Stevenson Middle School	Sidewalk segments adjacent to RLS Middle School per ATP application	Sidewalk
	Hunt Avenue	Monte Vista Avenue to June Lane	Sidewalk gap closure	Sidewalks
		Hunt Avenue at Edwards Street and Hunt Avenue at June Lane	Curb ramp upgrades	ADA Ramps
		Between Grove Court and June Lane	- Bicycle and pedestrian connection from Hunt Avenue to northern terminus of Adams Street - Enhanced midblock crosswalk on Hunt Avenue with curb extensions, high visibility striping and signage	Crossing treatments Pathway
SH-2 Downtown Pedestrian Improvements (No. 35 2015 CTP)	Main Street	Spring Street to Adams Street	Sidewalk upgrades, pedestrian lighting, pedestrian furniture and landscaping	Maintenance Sidewalks Place making
		Spring Street to Adams Street	Traffic calming (such as bulb outs)	Traffic calming



APPENDIX SH-C: DETAILED PROJECT LIST AND PRIORITIZATION

ST. HELENA PEDESTRIAN IMPROVEMENT LIST				
ID	Roadway	Limits or Intersection	Recommendations	Infrastructure Category
Constrained Project)		Recommended additions to CTP project		
		Main Street at Pine Street (Intersection)	- Curb extensions on all four corners with directional curb ramps - High visibility crosswalk on south leg with advanced signage	Crossing treatments ADA ramps
			Tree trimming on southwest corner	Maintenance
		Main Street at Adams Street (Intersection)	Curb extensions on all four corners with directional ramps	Crossing treatments ADA ramps
			Tree trimming on southwest corner	Maintenance
		Main Street at Hunt Avenue (Intersection)	- Marked crosswalk relocation from north leg to south leg 6' median refuge - Curb extensions at crosswalk with directional curb ramps	Crossing treatments ADA ramps
			Pedestrian wayfinding for Telegraph Alley	Wayfinding
		Main Street at Spring Street (Intersection)	- Relocate marked crosswalk from south leg to north leg 6' median refuge - Curb extensions at marked crosswalk with directional curb ramps	Crossing treatments ADA ramps
		Entire corridor	Raised median with restriped travel lanes to accommodate Class II bike lanes and maintain parking	Traffic calming
			Study to consider beautification / improvements to downtown alley ways and pedestrian paseos	Wayfinding Place making
SH-3 Sulphur Creek Class I Multi-Use Pathway (No. 36 2015 CTP Project)	Sulphur Creek	Sulphur Springs Avenue to Napa River	Class I Multi-Use Path	Pathway

APPENDIX SH-C: DETAILED PROJECT LIST AND PRIORITIZATION

ST. HELENA PEDESTRIAN IMPROVEMENT LIST				
ID	Roadway	Limits or Intersection	Recommendations	Infrastructure Category
SH-4 Napa River Class I Multi-Use Pathway (No. 37 2015 CTP Project)	Napa River	South City Limit to North City Limit	Class I Multi-Use Path (River Trail)	Pathway
SH-5 SHUSD Main Street Frontage Sidewalk	Main Street	Grayson Avenue to Dowdell Lane	Sidewalk on west side of street	Sidewalk
SH-6 Downtown Operations Study	Main Street	Pine Street to Mitchell Drive	Study considerations: synchronizing signals, peak recall ped phase, countdown signal heads, protected left turns/lead pedestrian intervals/pedestrian scrambles, slower walking speeds	Signal timing/operations
		Main Street at Pope Street (Intersection)	Feasibility study of roundabout or eliminating NB left turn at Mitchell Drive and redirecting traffic to Spring Street	Signal timing/operations
SH-9 Main Street ADA Improvements	Main Street	Spring Street to Pope Street	ADA driveways	ADA
		Dowdell Lane to El Bonita Avenue	ADA Decomposed Granite pathway along vineyard frontage on west side of street	Pathway
		Main Street at El Bonita Avenue (Intersection)	Sidewalk repair at northwest corner	Maintenance
		St Helena Chamber of Commerce	Detectable warning strip at back edge of sidewalk	ADA
TIER TWO				
SH-7 Main Street Business Frontage Improvements	Main Street	Main Street at Pope Street (Intersection)	Kiosks, mini shops or pocket park along edge of Sunshine Foods parking lot	Place making
		Gott’s	Parking lot driveway closure south of bridge with sidewalk widening or landscaping	Sidewalk
			- Pedestrian and vehicle wayfinding to Gott’s - Landscaping plan for property	Wayfinding Place making



APPENDIX SH-C: DETAILED PROJECT LIST AND PRIORITIZATION

ST. HELENA PEDESTRIAN IMPROVEMENT LIST				
ID	Roadway	Limits or Intersection	Recommendations	Infrastructure Category
SH-8 Main Street SRTS Improvements	Main Street	Main Street at Charter Oak Avenue	- Marked crosswalk relocation from north to south leg 6' refuge island - Rectangular Rapid Flashing Beacons in median and sidewalk - Curb extension or reduced radius on southeast corner	Crossing improvements ADA ramps
			- Curb extension with directional ramp on south side of Charter Oak Avenue east of train tracks - Marked crosswalk with advanced stop bar	
		Main Street at Vidovich Lane (Intersection)	- Marked crosswalk relocation from on west leg to align with sidewalk along Main Street - Advanced stop bar - Reduced radius on northwest corner with directional ramps	
SH-10 Main Street / Dowdell Transit Access Improvements	Main Street	Main Street at Dowdell Lane (Intersection)	- Ramp removal and sidewalk widening at existing bus stop - Bus stop relocation to Grayson Avenue at future signal	ADA Sidewalks Crossing improvements
SH-11 South St Helena / Unincorporated Connection		El Bonita Avenue to Inglewood Avenue	Sidewalk on west side of street or enhanced crosswalk on south leg of intersection at El Bonita Avenue to be coordinated with Vine Trail	Sidewalks Crossing improvements
SH-12 Sulphur Creek Crossing	Sulphur Creek	Southern terminus of Oak Avenue to Grayson Avenue	Study to develop feasibility of pedestrian crossing	Crossing improvements

Note: Tier One improvements are intended to be implemented within 5 years, Tier Two within 7-15 years, or opportunistically.



chapter five
circulation

5 circulation



A multimodal transportation network includes bicycles, pedestrians, transit, and automobiles.

5.1 Purpose of the Element

The Circulation Element provides the framework for a comprehensive and multimodal transportation network that supports and integrates with the other elements of the General Plan, especially the Land Use and Growth Management Element. The Circulation Element identifies the principal components of the City’s circulation system, as well as issues related to parking, public transit, and pedestrian and bicycle infrastructure. Standards and guiding principles for the implementation of transportation improvements are also included.

In increasing numbers, citizens of all ages in St. Helena are interested alternatives to the automobile, including walking, biking, and moving throughout the community in golf carts and other electric non-automobile vehicles. Given the relatively flat topography of most of St. Helena, the city provides ideal conditions for such alternative modes of transportation. A shift from traditional automobile-based transportation to alternative modes of transportation within St. Helena will bring numerous benefits to the community, including but not limited to:

- Decreased automobile traffic throughout the city due to an increased number of citizens choosing to walk, or bike, or use alternative modes of travel within the city;
- Health benefits for residents of St. Helena as a result of increased use of active transportation, including walking and biking;

1	introduction
2	land use and growth management
3	economic sustainability
4	public facilities and services
5	circulation
6	historic resources
7	community design
8	open space and conservation
9	public health, safety, and noise
10	climate change
11	housing
12	parks and recreation
13	arts, culture, and entertainment

5 circulation

- Decreased air pollution due to less automobile operation throughout the city; and
- Reduced wear and tear on streets within St. Helena.

In January 2012, the City of St Helena completed and approved a citywide bicycle and multimodal plan which is integrated with the Napa County bicycle network and the Napa Vine Trail. The approved plan will provide safe and convenient bicycle, pedestrian, and multi-modal access to schools, parks, open spaces, commercial areas, residential neighborhoods, and community facilities. With this plan and vision in place, the foundation to create a safer and healthier pedestrian and bicycle environment has been established. The City is focused and committed to turning this plan into reality.

The Circulation Element includes the following sections:

- **5.2 Circulation and Mobility Framework for St. Helena.** Describes a framework for circulation and mobility (p. 5-4).
- **5.3 Key Findings.** Identifies key findings based on an existing conditions analysis (p.5-6).
- **5.4 St. Helena's Circulation and Mobility Future.** Describes St. Helena's transportation future, including the proposed street typology system and network, pedestrian and bicycle network, transportation performance measures, and transportation demand management (TDM) program (p. 5-13).
- **5.5 Goals.** Defines goals that focus the direction of changes to St. Helena's transportation infrastructure and mobility and circulation-related policies and programs (p. 5-29).
- **5.6 Policies and Implementing Actions.** Identifies policies and implementing actions to develop an efficient, multimodal transportation network that minimizes impacts to the environment and neighborhoods (p. 5-31).

5 circulation

Regional planning initiatives such as the Napa Countywide Pedestrian Plan and the Napa County Travel Behavior Study provide context for the circulation and mobility framework in St. Helena

5.2 Circulation and Mobility Framework for St. Helena

Transportation planning in California is undergoing a broad transformation. A changing demographic, the growing movement to combat climate change, and an increasing focus on the public health benefits of biking and walking all highlight the need to provide greater choice in local and regional travel. Multimodal transportation and the integration of land use and transportation planning, while always important, are central components of this paradigm shift which has occurred within St. Helena, as well as statewide. These concepts are widely accepted as essential to creating successful circulation and mobility improvements. As municipalities and agencies plan for change, individuals seek to minimize travel costs and learn more every day about how decreasing their reliance on the automobile can reduce their carbon footprint and improve their physical health and well-being.

As part of this paradigm-shift, mobility no longer focuses only on private automobile and public transit use. Increasingly, it is defined by how community members can use alternative modes of transportation efficiently. The size, topography, and climate of St. Helena make it an ideal city for both walking and biking. According to data from the 2012-2016 American Community Survey 5-Year Estimates for the City of St. Helena, approximately 6 percent of St. Helena residents walk to work. This is a higher rate than the countywide average of 4 percent and reflects the City's continuing efforts to create and preserve safe walking environments and a pedestrian-friendly community. At the same time, less than 2 percent of St. Helena residents travel to work by bike and less than 1 percent commute by public transit. This reality underscores the importance of continued efforts to build a comprehensive circulation network in support of multiple travel modes (see Table 5.1). Circulation, as defined in this element, promotes human-scale mobility through a network of pathways and infrastructure that does not rely solely on the expansion of automobile roadways.

Past transportation planning methods have relied heavily on a traditional street classification and performance measurement system that focuses solely on the capacity of streets to accommodate automobile traffic volume, improve

5 circulation

traffic speed, and reduce delay time. This narrow approach fails to consider overall mobility, the existing and desired land use character of the community or conditions for non-automobile users. To better reflect and promote the paradigm shift towards non-automobile-based transportation within St. Helena, the traditional approach to transportation planning must be expanded to address “complete streets”. Efforts to improve the City’s network of streets, sidewalks, and services must meet important circulation and mobility goals and also contribute to broader efforts to create safe and attractive environments for human interaction.

In support of these concepts, the General Plan recognizes the need to establish new street typologies and performance standards, while tailoring improvements and mitigation to support multiple modes of travel and enhance surrounding land uses. The Circulation

Element sets forth goals, policies, and implementing actions that bolster this place-based approach and will guide decisions about improvements to the public right-of-way to best meet the community’s vision and to maximize the safety of St. Helena’s residents and visitors.

TABLE 5.1: Journey to Work by Mode of Travel

Mode	St. Helena		Napa County	
	2000	2016	2000	2016
Drove alone	69.2%	77.8%	72.7%	75.8%
Carpooled	13.1%	3.8%	14.8%	11.6%
Transit	1.3%	1.0%	1.4%	1.5%
Bicycle	0.3%	2.6%	0.2%	0.7%
Motorcycle	0.0%	0.0%	0.8%	0.1%
Walked	7.2%	6.2%	4.1%	4.0%
Other means	0.9%	0.0%	0.8%	0.5%
Worked at home	8.0%	8.6%	5.1%	5.8%
Source: U.S. Census Bureau; Census 2000, American Community Survey 2016 Estimates				

5 circulation



Many neighborhoods are within walking distance of schools and the downtown.

5.3 Key Findings

There are several challenges and opportunities facing St. Helena related to circulation. The following key findings are based upon comprehensive existing conditions analysis and community input.

- St. Helena's street network has largely been developed on a grid. However, some sections of the network, particularly on the east side of State Route 29, are not connected. The lack of a complete traffic circulation system funnels the majority of local trips onto several streets, particularly when State Route 29 is heavily congested. The 1993 General Plan included plans for multiple street extensions on local roadways to accommodate future development. While a handful of projects have been implemented, most have not. Given the shift towards non-automobile-based transportation, these extensions are an opportunity to create bicycle and pedestrian connections (as well as emergency vehicular access where appropriate and beneficial) to improve non-automobile circulation throughout the city. Additionally, development of a comprehensive traffic calming program with a focus on non-automotive circulation improvements will preserve and enhance the livability of neighborhoods and address resident concerns about traffic safety, such as speeding on residential streets.
- According to U.S Census data, the mode share for bicycle and pedestrian commute trips from St. Helena decreased between 1990 and 2000 (by 1.0 percent and 1.2 percent respectively). This trend has continued to present day for pedestrians but has changed for cyclists. Based on the 2012-2016 American Community Survey 5-Year Estimates, the percentage of St. Helena residents who walk to work decreased from 8.4 percent in 2012 to 6.2 percent in 2016, while over the same time period, the numbers of those biking to work in St. Helena increased from 0.6 percent to 2.5 percent since adopting the bicycle master plan. Developing a comprehensive, safe and accessible pedestrian and bicycle network will promote non-motorized trips and reduce single-occupancy vehicle trips, as well as reflect trends in how St. Helena residents move around the city and larger Napa Valley region.
- St. Helena's senior population is expected to increase substantially by 2040. Planning for and developing a pedestrian network that accommodates the city's most vulnerable users, such as seniors, children, and individuals of

TABLE 5.2: Destinations for Weekday Trips of Residents Living in St. Helena

Origin	Destination	Number of Total Trips	Percentage of Total Trips
St. Helena	St. Helena	6,450	41%
St. Helena	Napa	1,896	12%
St. Helena	Calistoga	655	4%
St. Helena	Yountville	98	1%
St. Helena	American Canyon	125	1%
St. Helena	Remainder of Napa County	5,564	36%
St. Helena	Outside Napa County	801	5%
	Total	2,703	100%

Source: Napa County Travel Behavioral Study, Fehr and Peers, 2014

limited mobility, will ensure that St. Helena's streets are safe and accessible for all, in consideration of the Americans with Disabilities Act (ADA) requirements. St. Helena's senior population will increase substantially by 2030. A pedestrian network that accommodates the City's most vulnerable users, such as seniors, children and individuals of limited mobility, will ensure that St. Helena's streets are safe and accessible for all. Relevant planning initiatives include the 2010 ADA Transition Plan and the 2016 Napa Countywide Pedestrian Plan.

- Many families live within walking or biking distance of St. Helena's schools, which presents an opportunity to decrease automobile use. Safe Routes to School is a national program that improves safety and encourages students to walk and bicycle to school. Such programs work to reduce traffic congestion and improve the health of both children and the environment, and funding is available for implementation from State and federal sources.

5 circulation

- Several open spaces and parks located within St. Helena and in the surrounding area, including agricultural areas and the Napa Valley Vine Trail, lack well-defined and accessible connections for both pedestrians and bicyclists. Funding sources for the rehabilitation of existing sidewalks to ensure the safety of residents and visitors is also needed. Future opportunities for the development of multi-use paths with an emphasis on access, wayfinding, signage, and parking locations at trailheads will be a priority. Similarly, collaboration with other jurisdictions to expand opportunities to provide pedestrian and bicycle access throughout the Napa Valley requires focus, as these improvements have the potential to create alternative recreational and commuting opportunities for both visitors and local residents.
- In the past, St. Helena has relied solely on traditional Level of Service (LOS) standards for measuring transportation impacts from new development, which account for auto vehicle delay at intersections and along roadway segments. This approach, while effective in measuring and regulating vehicular transportation impacts, does not place any emphasis on enhancing

TABLE 5.3: Origin of Workers Traveling to St. Helena for Work

Origin	Destination	Number of Total Workers	Percentage of Total Workers
Napa	St. Helena	1,793	11%
St. Helena	St. Helena	6,450	39%
Calistoga	St. Helena	444	3%
Yountville	St. Helena	246	3%
Remainder of Napa County	St. Helena	6,841	41%
Living Elsewhere in California	St. Helena	841	5%
	Total	16,615	100%

Source: Napa County Travel Behavior Study, Fehr and Peers, 2014

5 circulation



The St. Helena Vine provides local service throughout the City.

the use of alternate modes of transportation, such as the transit, walking, and bicycling by enhancing access to those modes of transportation. This General Plan includes policies and implementation measures that rely on the use of LOS, while supporting all modes of travel when measuring and mitigating transportation impacts.

- With a statewide emphasis on shifting travel from single-occupancy vehicles to carpooling, transit use, and increasing bicycle and pedestrian trips to reduce greenhouse gas emissions and Vehicle Miles Traveled (VMT), new performance measures that recognize the priorities of a range of roadway users will be needed.
- According to U.S. Census data, more workers are commuting into St. Helena than are living within the city. This suggests a mismatch between the type of employment and residential units in St. Helena. A balanced ratio between jobs and housing can help reduce travel times and traffic congestion, as well as VMT.
- The primary transit option in the Napa Valley is the Vine bus service. Development and land use patterns in the Napa Valley have resulted in low rates of transit ridership. According to the 2012-2016 American Community Survey 5-Year Estimates, 0.9 percent of St. Helena residents commute by

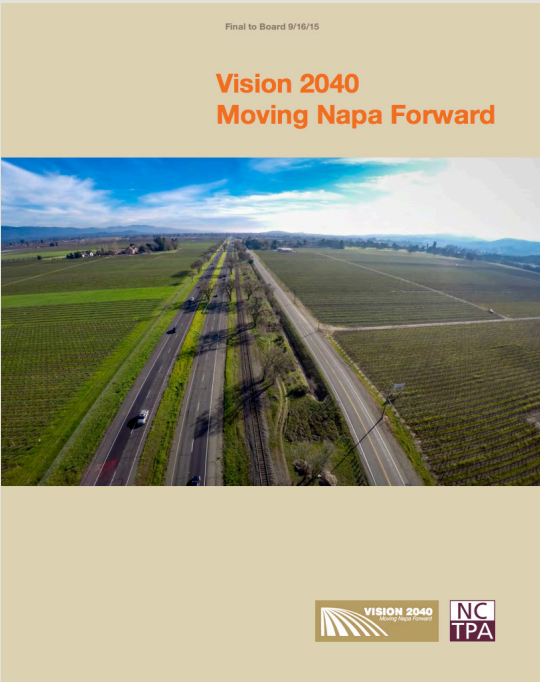
5 circulation

transit as compared to 5.2 percent statewide. Additional funding and support for increasing bus service will enhance long-term strategies for a sustainable transportation system.

- A significant portion of Napa County's traffic congestion results from tourists traveling throughout the region. There is increasing support for tourism that places less reliance on the automobile, such as the development of new resort/hotel facilities that are located and designed so that guests can conveniently walk or bike to nearby dining, shops, and other local amenities, or that rely on shuttle transportation provided by the resort/hotel. The development of the Vine Trail, a regional walking and biking trail system will connect St. Helena to the rest of the Napa Valley, and will also help increase reliance on pedestrian and bicycle transportation modes, thereby helping to manage congestion in the area.
- Regional trips to and from St. Helena typically begin or end within Napa County. The majority of these trips originate and/or terminate in the City of Napa, Deer Park, Calistoga, Yountville, and Angwin. Developing viable transportation alternatives to single-occupancy vehicle trips for these regional trips will help to reduce VMT.
- Because State Route 29 is the main route for vehicles traveling from Lake County or Northern Sonoma County to the City of Napa and destinations to the south, inter-county travel contributes to significant congestion along St. Helena's Main Street. During peak travel times, less than half of all vehicles on State Route 29 are traveling to or from destinations within St. Helena. While policies and implementing actions in the General Plan seek to improve circulation within the city, additional housing, employment, and public transit policies at the regional level will be required to reduce VMT throughout the Napa Valley, and in turn, St. Helena.
- Although there is rail service for tourists on the Wine Train, no commuter rail service exists at this time. According to the Napa Valley Transportation Authority (NVTa) 2003 Napa/Solano Passenger/Freight Rail Study, commuter rail and light rail service in the area is not viable due to high costs, a small service population and lack of adequate rail infrastructure to support higher speeds.

CONCEPTS, TRENDS, AND IDEAS

Regional Coordination



Vision 2040: Moving Napa Forward outlines a comprehensive vision for the County’s transportation system in 2040.

The Napa Valley Transportation Authority (NVTa) is a key partner and resource in regional transportation planning, programming and funding administration for Napa County. The NVTa is a Joint Powers Agency (JPA) comprised of the City of Calistoga, City of St. Helena, Town of Yountville, City of Napa, City of American Canyon, and Napa County. Originally known as the Napa County Transportation and Planning Agency (NCTPA), the agency’s Board of Directors approved a resolution to re-brand as NVTa in February 2016 to clarify the agency’s role in the community. The NVTa’s Board of Directors includes the mayors and one councilmember of each of the jurisdictions in the County, and the Chairman of the Board and one Supervisor of Napa County, and one non-voting representative from the Paratransit Coordinating Council. The NVTa operates the countywide transportation program, including countywide transit service, paratransit, community shuttles, and the Vine Transit.

In 2015, the NVTa issued The Napa Countywide Transportation Plan-Vision 2040: Moving Napa Forward, a report that identifies the transportation issues facing Napa County and outlines a comprehensive vision for the County’s transportation system in 2040. This report includes a series of goals designed to attain this vision and addresses how strategic transportation planning may enable the County to resolve key issues that might arise in the future due to projected population and employment growth. The Circulation Element includes a number of policies and implementation actions that support NVTa recommendations, such as transportation demand management.

5 circulation



An interconnected multimodal system will include bicycle and pedestrian paths.

- The Napa Valley Wine Train, which operates on the former Southern Pacific Rail line, is a tourist-oriented, recreational ride carrying riders on a round trip between Napa and St. Helena. Due to an agreement with the California Public Utilities Commission (CPUC), the train does not currently stop to board or disembark passengers at any location other than the point of origination in the City of Napa and partnering wineries and vineyards included in select packages that include winery tours. Opportunities exist to reduce reliance on the automobile for access, given that if passengers are able to board and disembark in St Helena, this would decrease automobile traffic demand along the Wine Train Corridor. Additionally, hotel/hospitality facilities and other tourism-oriented amenities located in close proximity to the Wine Train right-of-way would be consistent with the City's goal of reducing the tourism industry's reliance on the automobile.

5 circulation



Bicycle and pedestrian paths can be located adjacent to creeks.

5.4 St. Helena's Circulation and Mobility Future

St. Helena's transportation infrastructure and compact development pattern create a relatively walkable community, despite being located in a predominantly rural area. It also provides direct access to regional destinations throughout the Napa Valley. However, key constraints to efficient and sustainable circulation in St. Helena include congestion along State Route 29 and regional land use patterns that are not conducive to efficient transit service, walking or biking.

The City of St. Helena and Napa County share the goal of reducing traffic congestion in the region by encouraging the development of a multimodal transportation network, supported by land use decisions that encourage alternatives to single-occupancy vehicle trips. The Circulation Element identifies the key components of a sustainable transportation system, including the following:

- Street Typology System and Network;
- Pedestrian and Bicycle Network;
- Transportation Performance Measures; and
- Transportation Demand Management Program.

5 circulation



Residential streets provide access to neighborhoods.

STREET TYPOLOGY SYSTEM AND NETWORK

Street Typology System

The General Plan street network and street typology system is shown on Figure 5.1. The St. Helena General Plan Circulation Element introduces a new street typology system, replacing the previous street classifications, which established one set of design and operation standards based on a rigid, hierarchical classification of roadways. New street typologies consider the street context and alternate travel modes to help ensure that street standards consider a roadway's relation to its surrounding land uses, appropriate travel speeds, and the need to accommodate multiple travel modes.

The streets of a given neighborhood or district have characteristics that generally follow the land use character of that area and the role that streets play in the greater street network of the surrounding community. For example, a residential street that serves as a collector will have different characteristics and design features from a residential street that provides local access. Similarly, a downtown/mixed-use street and an industrial collector street serve different

5 circulation

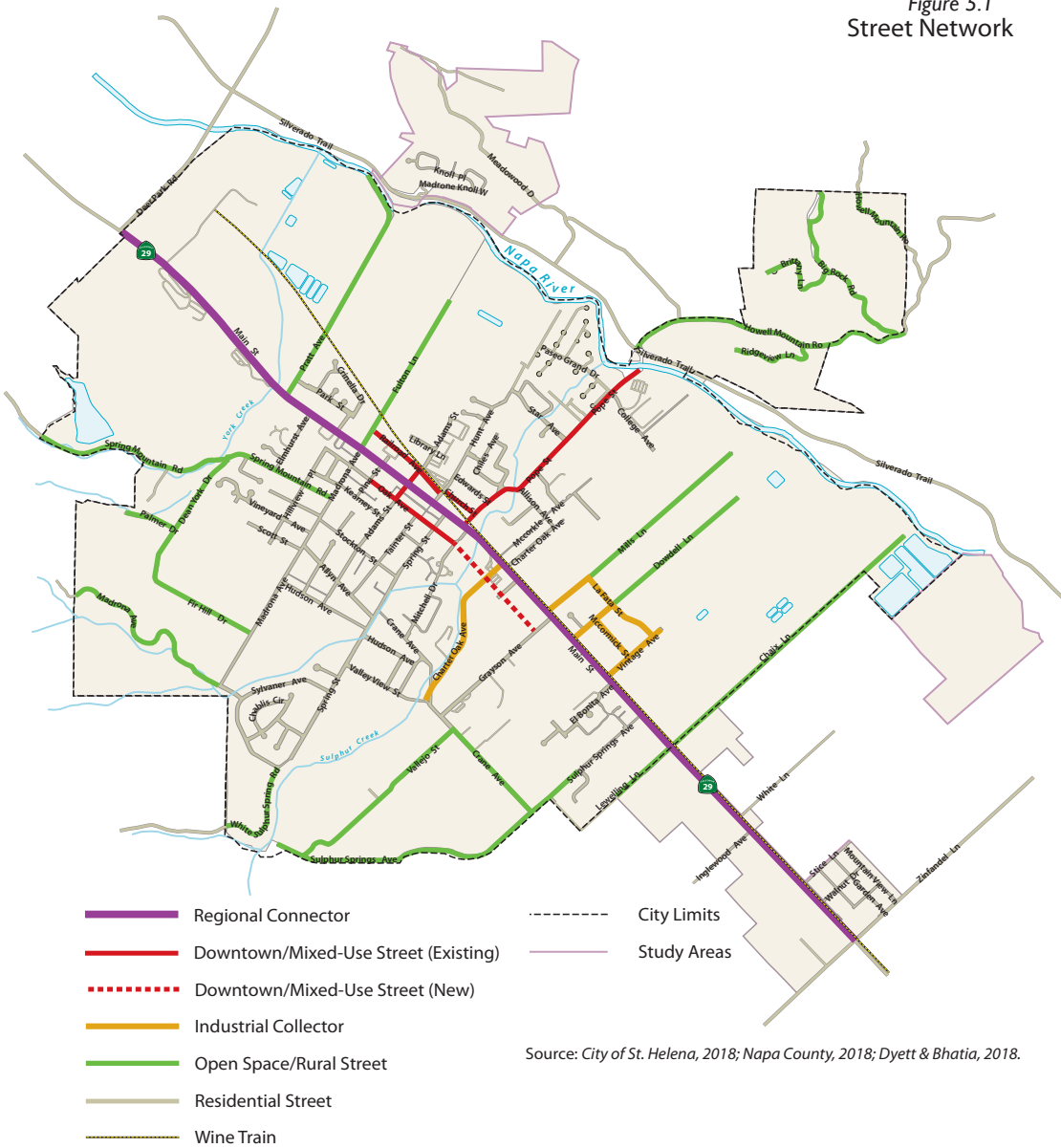
functions. A downtown/mixed-use street emphasizes accommodating several transportation modes, while an industrial collector emphasizes accommodating heavy trucks and automobiles. Consequently, the design features and overall user experience may differ greatly.

The following street typologies are part of the City's new street typology system. Application of these standards should be considered for any new development, street repaving, or redevelopment project.

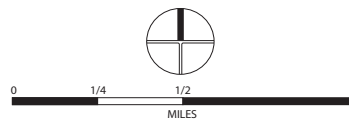
- **Open Space/Rural Street** – Provides access to open space, vineyard and agricultural areas, and rural residential uses. Sidewalks and curbs are not typically present on rural street types, though bicycle boulevards and low speed limits may be present on some open space or rural streets.
- **Industrial Collector Street** – Supports truck access to manufacturing and industrial land uses. While sidewalks are present on all streets, bicycle, and transit facilities are not typically present for this street typology.
- **Residential Street** – Provides access to neighborhoods. This street type supports local trips, with an emphasis on pedestrian and bicycle amenities and slow driving speeds.
- **Downtown/Mixed-Use Street** – Supports all travel modes. It includes specific design features that promote livable streets and multimodal access such as wide sidewalks, traffic calming features, and bicycle boulevards.
- **Regional Connector Street (Main Street)** – Supports all modes, but is primarily designed to provide citywide and regional access for cars, transit and trucks trips. As Main Street/State Route 29 is the key commercial center for St. Helena, specific design features that foster livable streets and multimodal access may be applied, including wide sidewalks with regular street crossings, high-quality pedestrian amenities, and enhanced bus transit facilities. At the edge of the downtown area, Main Street/State Route 29 transitions into a more suburban and rural environment. These sections have higher vehicle speeds and less walking and bicycling activity than the center of downtown.

5 circulation

Figure 5.1
Street Network



GENERAL PLAN UPDATE
City of St. Helena



5 circulation

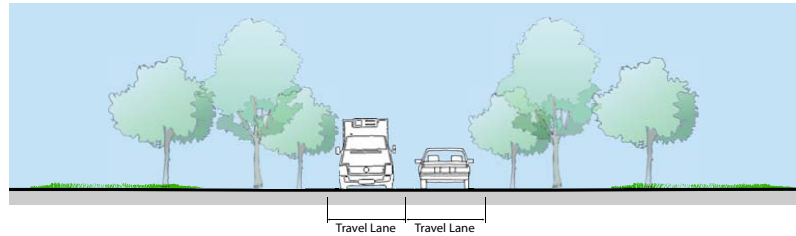
TABLE 5.4: Street Typologies

Street Typology	Vehicle Traffic Levels	Pedestrian Facilities	Bicycle Facilities (designated network)	Desired Vehicle Speeds/ Traffic Calming	Truck Route	Transportation Performance Measure
Open Space/ Rural Street	Low / moderate	Sidewalks not typically included	Bicycle route or boulevard	25-35 mph/ Yes	Accommodated	Citywide ATG1, bicycle connectivity, pedestrian connectivity
Industrial Collector Street	Low	Sidewalks	Typically none	25 mph/ No	Accommodated	Citywide ATG, bicycle connectivity, pedestrian connectivity
Residential Street	Low / moderate	Sidewalks (with landscape buffer or street trees where appropriate), crosswalks where appropriate	Bicycle boulevard or lane	15-25 mph/ Yes	Accommodated on designated routes	Citywide ATG, bicycle connectivity, pedestrian connectivity
Downtown/ Mixed-Use Street	Low to moderate	Wide sidewalks (with landscape buffer or street trees where appropriate), regular crosswalks	Bicycle boulevard or lane	25 mph/ Yes	Accommodated on designated routes	Citywide ATG, Bicycle connectivity, pedestrian connectivity
Regional Connector Street (Main Street)	High	Wide sidewalks (with landscape buffer or street trees where appropriate) and regular crosswalks in downtown area. Outside of downtown: regular crosswalks and sidewalks included where demand warrants	Bicycle route, lane or adjacent trail	25 -35 mph/ context-based	Accommodated	Peak hour vehicle travel time, citywide ATG
Notes: 1ATG = Automobile Trip Generation Source: Fehr & Peers, 2009						

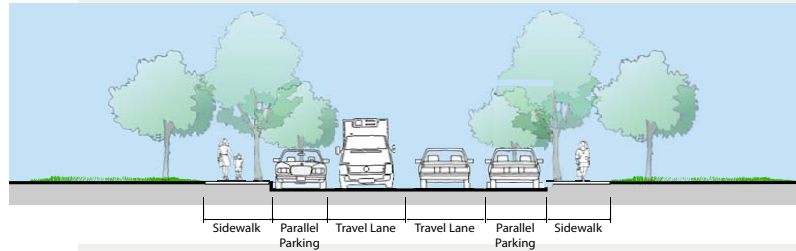
5 circulation

Figure 5.2
Street Typology Cross Sections

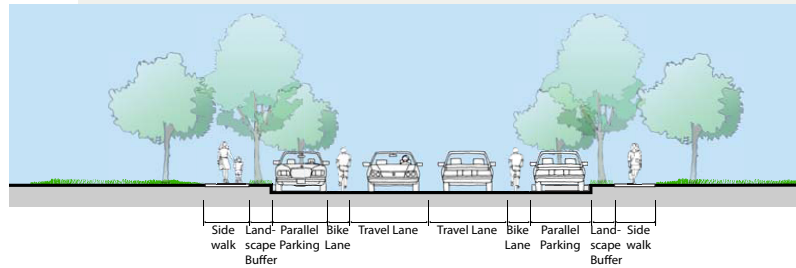
Open Space/
Rural Street



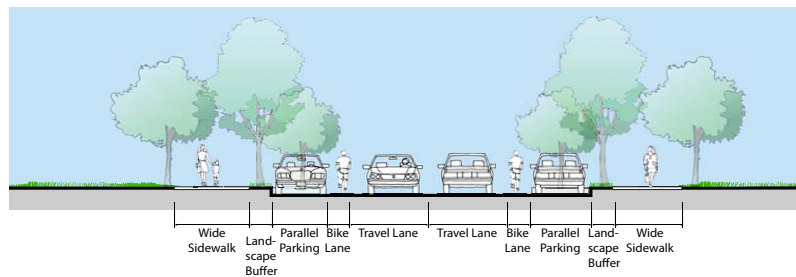
Industrial
Collector
Street



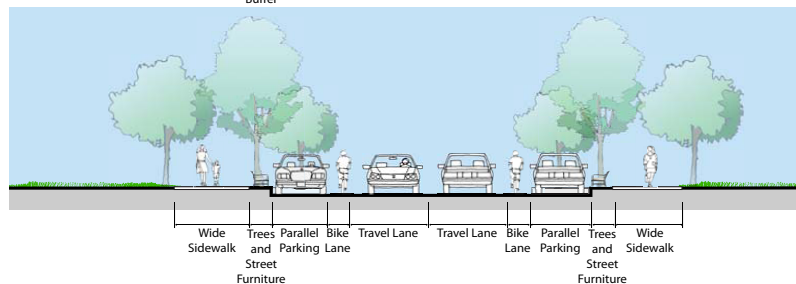
Residential
Street



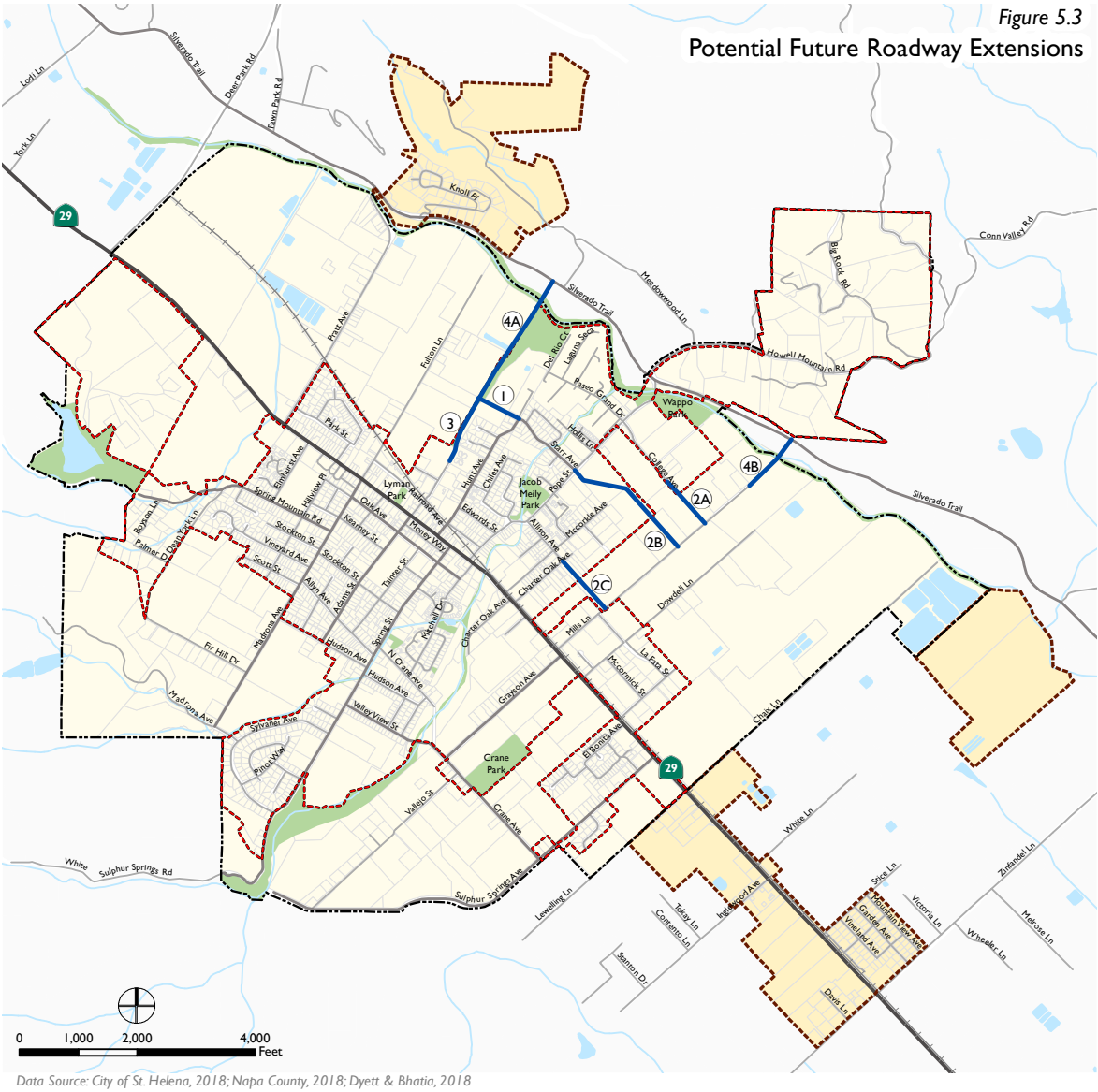
Downtown/
Mixed-Use
Street



Regional
Connector
Street



5 circulation



- | | | | |
|--------------------------|----------------------|--|--|
| Potential Future Roadway | Parks and Open Space | Starr Avenue extension north to Adams Street | Adams Street from its current eastern terminus to Starr Avenue |
| Urban Limit Line | Study Areas | College Avenue, Starr Avenue or Allison Avenue extension to Mills Lane | Extension to Silverado Trail, by extending Adams Street or Mills Lane. |
| City of St. Helena | | | |

GENERAL PLAN UPDATE
City of St. Helena

5 circulation

Circulation Study Alternatives

The St. Helena street network includes one new roadway, the extension of Oak Avenue from Mitchell Drive to Grayson Avenue, to be constructed as a Downtown Mixed Use street. In order to manage congestion and provide additional new connections within the city, as part of the General Plan update, several other new streets are identified as potential options to explore in the future. In most cases, the potential connections provide options for residents to travel from one part of town to another without having to travel on State Route 29, which is frequently congested due to high regional traffic demand. The potential street extensions provide for various levels of access to accommodate different modes of travel. As shown in Figure 5.3, they include the following:

- 1.0. Starr Avenue extension north to Adams Street;
- 2A/2B/2C. Starr Avenue, College Avenue, or Allison Avenue extension to Mills Lane;
- 3.0. Adams Street extension from its current eastern terminus to Starr Avenue; and
- 4A/4B. Alternative extensions to the Silverado Trail, by studying potential extensions of Adams Street or Mills Lane.

General Plan implementing action CR1.B provides guidance for any future roadway extensions. The City envisions that each of the “Future Roadway Extensions”, as identified in Figure 5.3, would at a minimum consist of a bicycle/pedestrian path, equivalent to a “Class 1 Bike Path”, and would also be designed to accommodate emergency vehicles. Any proposed improvement of the road extensions identified in Figure 5.3 intended to accommodate vehicular automobile and truck traffic would trigger a requirement for a “Special Study”, subject to City Council approval, to assess the net benefit of the proposed vehicular improvement, including, among other issues, the cost of constructing the vehicular extension and any impacts of the vehicular extension on roads and neighborhoods in the area. Any development project proposed on property located within the future alignment of the “Future Roadway Extensions” as depicted in Figure 5.3, would,

5 circulation



as part of their review and entitlement process, be responsible for preparing a "Special Study" as described in this Chapter to determine whether the subject extension will consist of the minimum bike/pedestrian path improvement, or if the extension will be constructed to also accommodate vehicular auto and truck traffic. In either case, the subject development project would construct and fund its "fair share" cost of the "Future Roadway Extension".

Sidewalks in the Central Business District have several pedestrian amenities such as benches, trees, and street lights.

To reduce the attractiveness of the new streets as cut-through routes, vehicle turn restrictions may be implemented at particular locations. In some locations, new bridges may also be needed to replace bridges at the end of their design life, or as part of new street connections.

5 circulation



St. Helena has several Class III bicycle routes.

PEDESTRIAN AND BICYCLE NETWORK

Pedestrian Circulation

The Central Business District surrounding Main Street is where the greatest number of pedestrians will be served in St. Helena. Downtown was originally developed with a grid of streets that includes a comprehensive network of sidewalks. Older neighborhoods surrounding the downtown core generally have well-maintained sidewalks that provide pedestrian access between residential areas and schools, community centers, and other walkable destinations.

Neighborhoods near the city's periphery have fewer pedestrian amenities, and many lack sidewalks. Some of these neighborhoods have a rural character where sidewalks may not be appropriate, whereas other post-World War II suburban developments were designed primarily for vehicular access and would benefit from improved pedestrian access.

An inventory of existing sidewalks, marked crosswalks, curb ramps and trails was completed for St. Helena as part of the 2016 Napa Countywide Pedestrian Plan (See Figure 5.4). The Countywide Plan, which includes a pedestrian plan for St. Helena, identified pedestrian improvements for key areas of the city in order to improve pedestrian circulation in the vicinity of schools, businesses, and transit facilities, as well as to bolster connections to multi-use pathways.

Bicycle Circulation

St. Helena has an extensive network of Class III bicycle routes, which are routes marked for shared use with motor vehicles. However, bike lanes and multi-use paths that provide dedicated space for bicyclists have not yet been developed in St. Helena, and bicycle support facilities, such as bicycle parking, are lacking in many areas. Additionally, both pedestrian and bicycle access to open space and regional destinations throughout the Napa Valley could be improved through a system of off-street multi-use paths.

Reducing local vehicle trips into downtown St. Helena by shifting those trips to biking or walking would help alleviate congestion and parking concerns and promote increased health. Implementation of a citywide bikeway network that

5 circulation

includes the construction of bicycle facilities at activity centers throughout the city could greatly increase the mode share of bicycling. Key activity centers that could be conducive to increased rates of bicycling include the downtown area, bus stops, schools, parks, hotels, and local wineries. Development of the Vine Trail and a shared use path along Sulphur Creek would provide greater recreational, tourist, and commuting choices by bicycle.

Bicycle Classifications

The City's bikeways include three classifications: bike paths, lanes, and routes. These classifications are described below.

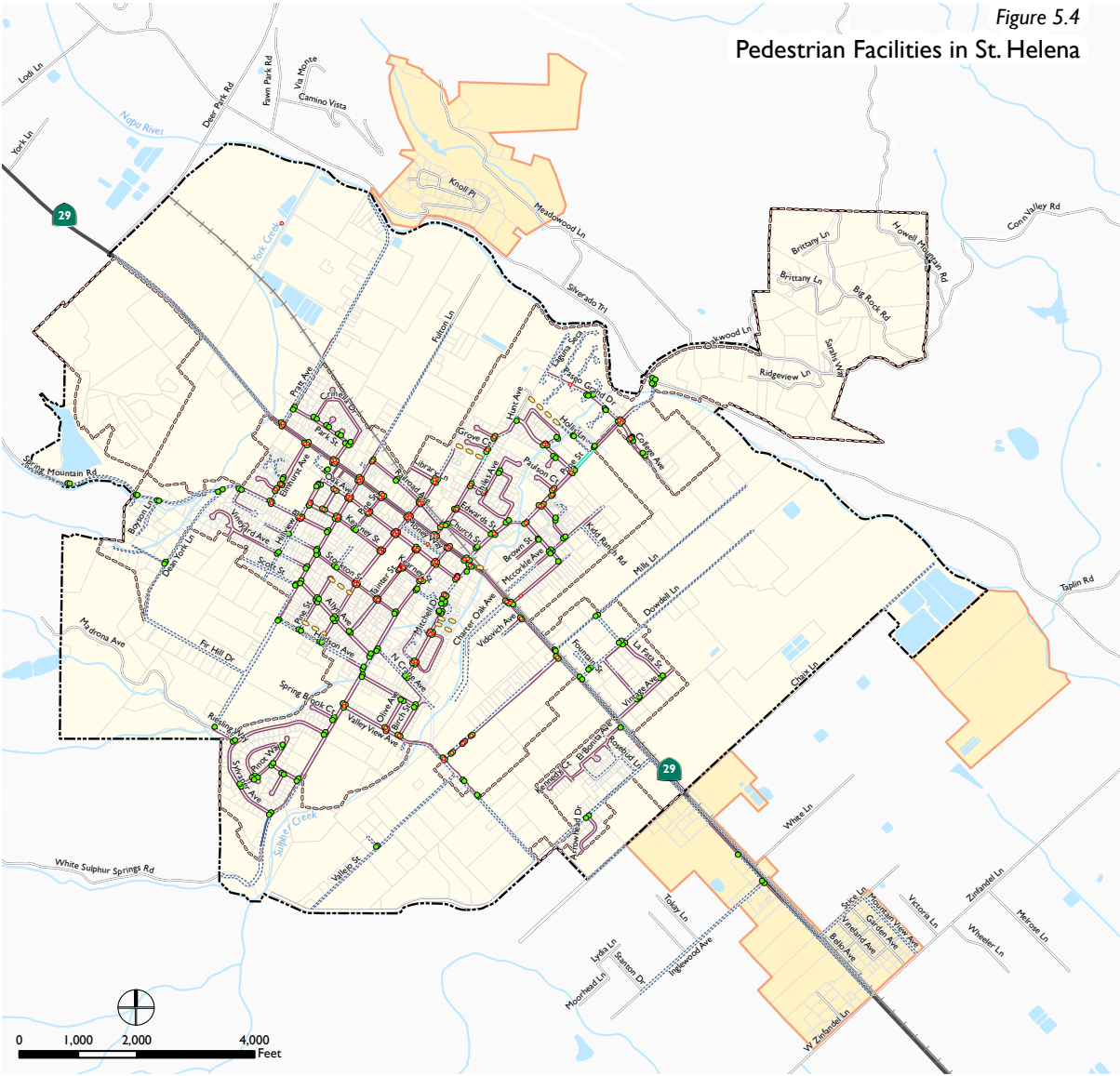
Class I Bikeway (Bike Path) paths provide a separate right-of-way and are designated for the exclusive use of people riding bicycles and walking with minimal cross-flow of vehicle traffic. Class I Bikeways can also offer opportunities not provided by the road system by serving as both recreational areas and/or desirable commuter routes.

Class II Bike Lanes provide designated street space for bicyclists, typically adjacent to the outer vehicle travel lanes. Bike lanes include special lane markings, pavement legends, and signage. Bike lanes may be enhanced with painted buffers between vehicle lanes and/or parking, and green paint at conflict zones (such as driveways or intersections).

Class III Bike Routes provide enhanced mixed-traffic conditions for bicyclists through signage, striping, and/or traffic calming treatments, and to provide continuity to a bikeway network. Bike routes are typically designated along gaps between bike trails or bike lanes, or along low-volume, low-speed streets. Bicycle boulevards provide further enhancements to bike routes to encourage slow speeds and discourage non-local vehicle traffic via traffic diverters, chicanes, traffic circles, and/or speed tables. Bicycle boulevards can also feature special wayfinding signage to nearby destinations or other bikeways.

Class IV Bikeway (Separated Bikeway) Separated Bikeways, also referred to as cycle tracks or protected bikeways, are bikeways for the exclusive use of bicycles which are physically separated from vehicle traffic. Guidelines for Separated

5 circulation



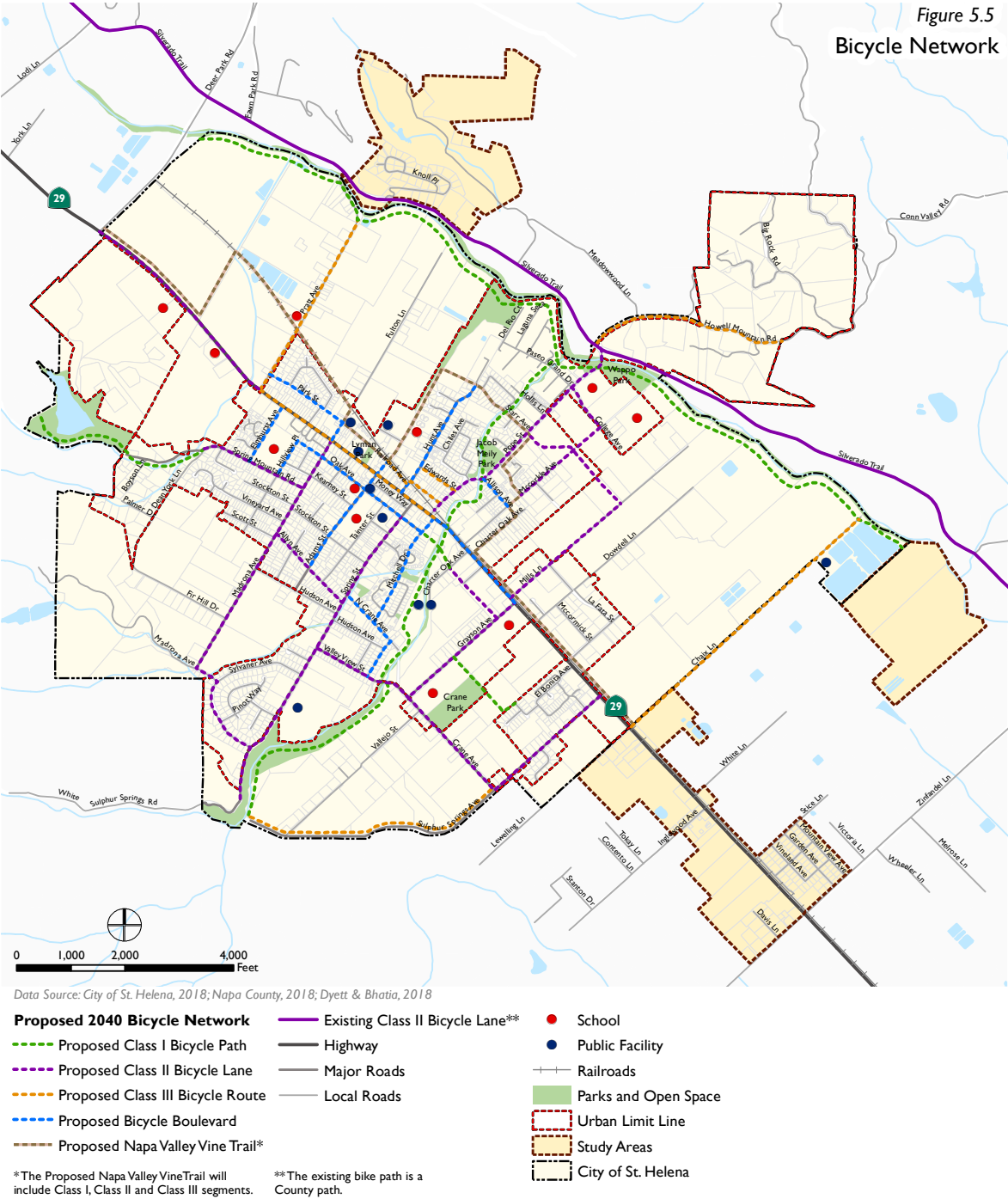
Data Source: City of St. Helena, 2019; NVTA, 2019; Dyett & Bhatia, 2019

- Curb
- Asphalt
- Existing
- Missing
- Railroads
- Water Features
- Urban Limit Line
- Study Areas
- City of St. Helena

GENERAL PLAN UPDATE
City of St. Helena

5-24 | ST. HELENA GENERAL PLAN UPDATE 2040

5 circulation



5 circulation

*A Class I bike trail connects
Pope Street to Wappo Park*



Bikeways were recently adopted by Caltrans in 2015. Types of separation may include, but are not limited to, grade separation, flexible posts, physical barriers, or on-street parking.

Approved Bicycle Network

St. Helena's bicycle network aims to maximize connectivity throughout the city (Figure 5.5). The St. Helena Bicycle Plan, prepared in collaboration with the Napa Valley Transportation Authority, outlines existing and planned bicycle routes intended to provide safe and convenient bicycle access to parks, open spaces, commercial areas, residential neighborhoods, and community facilities. Once completed, the network will play a key role in bolstering the City's efforts to increase the use of bicycles as non-auto modes of transit, and to reduce overall vehicle miles traveled in the city.

Proposed Class I bicycle pathways cross the city, connecting parks and open spaces with multimodal trails that are completely separate from auto traffic. These shared-use pathways provide key cross-city connections and include the proposed Napa Valley Vine Trail and a shared-use path along Sulphur Creek and

5 circulation



the Napa River. Additional Class I pathways connect the Lower Reservoir Park to Spring Mountain Road and Crane Park to Grayson Avenue. Shared-use paths should accommodate all pedestrians, including persons that use an assistive mobility device for a disability or medical condition.

Class II bicycle pathways that provide a designated lane for bicycle travel are proposed along many of St. Helena's streets. Key east-west routes include: Madrona Avenue between Main Street and Sylvaner Avenue; Spring Street between Oak Avenue and Sulphur Creek; Pope Street between Main Street and Silverado Trail; and Grayson Avenue and Sulphur Springs Avenue, between Main Street and Crane Avenue. Key north-south routes are located on Spring Mountain Road, Valley View Street, Crane Avenue, and State Route 29 between Deer Park Road and Pratt Avenue.

The network includes a series of Class III pathways designated for shared-use of vehicles and bicycles. Some of these pathways have an additional designation for use as Bicycle Boulevards. Key Class III pathways include Chaix Lane, Pratt Avenue, and State Route 29 between Pratt and Grayson avenues. Bicycle Boulevards are primarily located in the residential neighborhoods directly east

5 circulation

and west of Main Street. Key Bicycle Boulevards include Mitchell Drive, Adams Street, and Oak Avenue.

Bicycle Parking and Support Facilities

Every bicycle trip has two main components: the route selected by the bicyclist and the “end-of-trip” facilities at the destinations. The availability of both safe bicycle routes and secure and convenient facilities is critical to promoting greater bike usage in St. Helena. Bicycle facilities can include short- and long-term bicycle parking, showers, lockers, and good lighting.

Providing short- and long-term bicycle parking at key destinations, such as downtown St. Helena, parks, schools, community facilities, transit stops, and shopping areas, is an essential part of the development of a complete bicycle network. Bicycle parking that is highly visible, accessible, and easy to use can help encourage cycling as a mode of transportation in the community. Similarly, conveniently located facilities such as showers, bicycle repair stations, and air for inflating tires can encourage cycling, as can locating these facilities in well-lit areas and indoors or covered where possible.

TRANSPORTATION PERFORMANCE MEASURES

A key action to address the future of transportation and mobility in St. Helena will involve developing new transportation performance measures, in addition to more traditional level of service standards, to ensure a balanced perspective on transportation including all of the community’s values and interests. As such, the City is committed to augmenting the traditional automobile Level of Service (LOS) threshold with measures that capture transportation system performance from the perspective of all users and incorporate the environmental consequences of transportation decisions.

A new approach designed to achieve the following objectives will be needed:

- Develop an alternative way of evaluating new land use development impacts for automobiles, pedestrians, bicycles, and transit.

5 circulation

- Develop a quantifiable way of measuring the transportation-related GHG impacts and benefits of new land use development and transportation infrastructure improvements.

The purpose of augmenting current transportation performance measures is to develop a meaningful nexus between transportation-related development impacts and appropriate actions to address these impacts. Additional performance measures would improve multimodal circulation and manage traffic congestion in St. Helena. The reasons for adopting new standards include:

- Mitigation measures based solely on traditional LOS can sometimes result in widening roads and intersections in a way that conflicts with community character or other values established in this General Plan. Additionally, such measures in isolation can encourage additional vehicle trips and have a negative impact on other travel modes.
- Thresholds for traditional LOS standards are not necessarily linked to the City's vitality and quality of life and can make smart growth projects, such as mixed-use infill development in downtown St. Helena, more difficult.

Several targets, including operating standards for vehicular travel times on Main Street, standards for new auto trips generated by new development, as well as targets for increasing pedestrian and bicycle trips are set forth in the goals, policies, and implementing actions of this Element. Implementing action CR1.D calls for additional performance measures to improve multi-modal circulation and better address congestion in St. Helena.

TRANSPORTATION DEMAND MANAGEMENT PROGRAM

Transportation Demand Management (TDM) strategies aim to reduce the amount of motor vehicle traffic and manage parking to make travel behaviors more sustainable. TDM policies and programs also encourage the use of modes other than single-occupancy vehicles for travel. Strategies may include carpooling and car-sharing, transit subsidies or reimbursements, paid parking, and the provision of bicycle support facilities at workplaces.

5 circulation

The General Plan supports the establishment of a citywide TDM program to help reduce peak period motor vehicle traffic and manage vehicle parking within St. Helena. NVTAs Strategic Transportation Plan identifies a number of TDM strategies that are applicable to reducing motor vehicle traffic congestion in St. Helena. Funding for a citywide TDM program should be provided through traffic mitigation fees and in-lieu parking fees. In addition, the City should encourage existing employers to participate in the TDM program.

5 circulation



5.5 Goals

Meet Current and Future Transportation Needs.

Meet the current and future mobility needs of residents, businesses and tourists with a balanced, multimodal transportation system, with transportation performance measures that aim to reduce greenhouse gas emissions, manage vehicle congestion along the citywide street network, and increase non-automobile and emergency connections throughout St. Helena. The City plans and manages the transportation network to achieve the following objectives:

- a) Ensure that Traffic Service Level "C" or better be maintained at all signalized and unsignalized intersections in St. Helena, except along Main St/Hwy 29 where Service Level "D" shall be permitted. Exceptions to this goal may be permitted in situations where the preexisting 2015 Traffic Service Level do not meet these "C" and "D" standards. In such situations, the projected Traffic Service Level resulting from a proposed project, shall not be "significantly lower" than the 2015 Traffic Service levels as documented in the 2018 General Plan Update Program EIR. The City Council has the discretion to determine what constitutes a "significantly lower" Traffic Service Level.

5 circulation

Examples of measures of “significantly lower levels of service” include 1) should state deterioration from an acceptable LOS to an unacceptable LOS in accordance with NVTa’s Countywide Transportation Plan; 2) a significant increase in the volume to capacity ratio for a signalized intersection; or 3) a significant increase in delay at an unsignalized intersection.

b) Provide a complete bicycle and pedestrian network between residential areas, downtown, recreational open space areas, and other major activity centers identified by the City.

c) Reduce transportation-based GHG emissions communitywide and from City-controlled sources.

d) Increase the share of trips made by transit, bicycling, and walking (as measured by the American Community Survey).

e) Reduce current peak hour vehicle travel times on Main Street.

f) Create an Interconnected Multimodal Circulation System with a safe and integrated bicycle and pedestrian system throughout St. Helena for people of all ages and abilities.

g) Increase the City’s share of walking, bicycling, transit, and carpooling trips, in accordance with NVTa’s 2035 goals.

h) Provide a safe, efficient, and well-maintained circulation system that supports safe and efficient travel for all modes and users.

i) Ensure a Sustainable Transportation Network. Reduce congestion and greenhouse gas emissions and increase the mode share for all non-single-occupancy trips. To achieve this goal, the City supports the use of transportation demand management (TDM) strategies that promote sustainable transportation practices through encouragement, education, and incentives.

5.6 Policies and Implementing Actions

A range of policies and implementing actions are outlined below and organized into the following topic areas:

1. Balanced and Multimodal System;
2. Safe, Accessible, and Comprehensive Bicycle and Pedestrian Network;
3. Sustainable Mobility Practices;
4. Safe and Well-Maintained Circulation System;
5. Parking; and
6. Improvements and Phasing.

The following policies and actions mandate, encourage, or allow certain initiatives to be pursued throughout the duration of the General Plan. Together, they provide strategic directions for City staff and partners, highlighting where time and resources should be focused.

5 circulation

topic area

1 BALANCED AND MULTIMODAL SYSTEM

Policies

CR1.1 Promote a connected street and bicycle and pedestrian network within the city to provide better internal automobile, bicycle, and pedestrian connections for residents.

CR1.2 Provide complete streets that balance the diverse needs of users of the public right-of-way, in accordance with the California Complete Streets Act of 2008.

CR1.3 Pursue appropriate funding for the development of a balanced transportation system.

CR1.4 Develop and use, in addition to intersection level of service standards, performance measures that consider all road users to determine transportation impacts of new development.

CR1.5 Avoid mitigation measures that negatively impact the walking and bicycling environment and encourage driving.

CR1.6 Continue to support NVTa in the provision of convenient transit, including regional and local service. Support more frequent and reliable transit service between communities to reduce the number of people traveling to or from St. Helena to work by private vehicle. Promote and encourage use of the St. Helena Vine Shuttle.



Promoting complete streets will balance the diverse needs of pedestrians, bicycles, automobiles, and transit.

5 circulation

topic area

1 BALANCED AND MULTIMODAL SYSTEM

CR1.7 Explore the use of the rail corridor to reduce traffic, including working with the owners of the Wine Train to consider the possibility of developing hospitality and other tourist-oriented uses that are primarily accessed by passengers riding on the Wine Train Corridor.

CR1.8 Reduce transportation-based GHG emissions from City-controlled sources by employing the following strategies:

- Complete the City's bicycle and pedestrian network, which will increase transportation choices in the city and reduce the demand for vehicle travel
- Implement "smart growth" and sustainable planning principles as defined in the Land Use Element;
- Maximize the overall efficiency of the transportation system, including managing the transportation network through a citywide transportation system management program; Encourage/provide incentives for employee car pools.
- Implement "smart growth" and sustainable planning principles as defined in the Land Use and Growth Management Element;
- Encourage jobs/housing match, as defined in the Housing Element; and
- Encourage/provide incentives for employee car pools.

CR1.9 Promote a walking and bicycling environment that is comfortable and convenient. Ensure that all St. Helena streets have no more than a single through-automobile lane in each direction, plus a single left-hand turning lane where appropriate, even if this requirement increases vehicle travel times. Allow exceptions if an extra lane would reduce the possibility of collisions.

CR1.10 Strive to maintain a ten minute or less travel time during peak periods along State Route 29, from the northern and southern city boundaries.

5 circulation

topic area

1 BALANCED AND MULTIMODAL SYSTEM

CR1.11 Establish a multimodal transportation impact fee program as part of the City's existing transportation impact fee, to finance and implement project mitigations that help achieve the City's traffic reduction goals. As part of the multimodal transportation impact fee program, require new development to analyze travel demand and finance and construct all required off-site circulation improvements, including proposed road extensions, necessary to mitigate project impacts and to reduce the severity of cumulative transportation impacts to all modes of travel.

Implementing Actions

CR1.A Use the street typologies as defined in the Circulation Element as a basis for improving and managing streets. Improve vehicle, pedestrian and bicycle facilities on streets based on this system.

CR1.B Extend Oak Avenue south from Mitchell Drive to Grayson Avenue, constructing the new roadway as a two-lane Downtown/Mixed Use Street with bicycle lanes and sidewalks, consistent with the City's Engineering Standards. Implement traffic calming measures, such as speed lumps, bulb outs, and/or chicanes to limit travel speeds between intersections and optimize safety for all roadway users.

CR1.C Evaluate the following new connections to promote increased bicycle, pedestrian, and non-automobile-based transportation, consistent with the requirement for the preparation of a "Special Study" as described in the Circulation Element. Where feasible, preserve existing rights-of-way.

- Starr Avenue extension north to Adams Street
- Consider three options for a connection to Mills Lane: a) Starr Avenue extension to Mills Lane; b) College Avenue extension to Mills Lane; or c) Allison Avenue extension to Mills Lane
- Adams Street from its current eastern terminus to Starr Avenue

5 circulation

topic area

1 BALANCED AND MULTIMODAL SYSTEM

- Consider two options to connect downtown St. Helena to Silverado Trail: a) Adams Street extension to Silverado Trail; b) Mills Lane extension to Silverado Trail

CR1.D Identify streets that should become “more complete,” through consideration of transit priorities, sidewalk gap closures, new bikeways, and vehicle traffic calming measures.

CR1.E Adopt and implement transportation performance measures that promote an efficient transportation system from the perspective of all users. These performance measures shall supplement the City’s traditional automobile Level of Service (LOS) thresholds with the goal of improving multimodal circulation and managing traffic congestion in St. Helena.

CR1.F Support efforts to secure additional funding for regional transit service to St. Helena for residents, workers and visitors as a viable alternative to travel by private automobile. Focus on improving the bus service for use by commuters.

CR1.G Subject all rail corridor uses to use permit review; locate passenger facilities within zoning districts which minimize impacts to established and proposed land uses.

CR1.H Study the potential for integrating Wine Train activities with car-free tourism strategies to provide an alternative for tourists to visit St. Helena without a car.

CR1.I Measure total automobile trips generated by new developments on a per project basis, to reduce vehicle trips. Maintain a citywide trip generation analysis methodology that evaluates the effects of land use and built environment changes on travel choices and behavior.

5 circulation

topic area

1 BALANCED AND MULTIMODAL SYSTEM

CR1.J Evaluate changes to vehicle travel times along State Route 29 on a per-development or per-project basis. Establish significance criteria for determining if an increase in travel time or decrease in Intersection Level of Service, resulting from new development is significant.

CR1.K As new land use development and redevelopment occurs, require the provision of links to existing streets, street right-of-way dedications, and improvements to the local roadway network (including pedestrian, transit, bicycle, and other non-motorized vehicle improvements), consistent with adopted Engineering Standards, public safety standards, and the St. Helena Bicycle Plan. Additionally, in the case of subdivisions, require the provision of sidewalks on all local streets within the development.

CR1.L Adopt and implement a citywide, Multimodal Transportation Mitigation Fee program to provide funding on a fair share bases for transportation improvements that reduce citywide automobile trips and contribute to the provision of a continuous path of travel for walking and bicycling from the development site to the center of downtown and other key destinations. Such transportation improvements include completing the bicycle and pedestrian network, implementing transportation demand and systems management strategies, and improving traffic signal coordination on State Route 29. Ensure that fees take into consideration the contribution of new development to changes in net new automobile trips and change in travel time along State Route 29.

CR1.M Continue to work with Caltrans to ensure regional coordination and manage congestion on State Route 29.

5 circulation

topic area

2 COMPREHENSIVE PEDESTRIAN AND BICYCLE NETWORK**Policies**

CR2.1 Create a comprehensive bicycle and pedestrian network that enhances neighborhood connectivity. Develop the system as shown in Figure 5.4 to expand and improve the pedestrian and bikeway system.

CR2.2 Promote walking and bicycling as safe and convenient modes of transportation.

CR2.3 Ensure secure, accessible, and convenient bicycle parking facilities throughout St. Helena, including downtown, commercial areas, schools, and parks.

CR2.4 Preserve and enhance pedestrian connectivity and safety throughout St. Helena.

CR2.5 Improve the pedestrian experience through streetscape enhancements, focusing improvements where there is the greatest need, and by orienting development toward the street.

CR2.6 Encourage walking and bicycling trips to St. Helena schools.



Walking and bicycling should be promoted as safe and convenient modes of transportation.

5 circulation

topic area

2 COMPREHENSIVE PEDESTRIAN AND BICYCLE NETWORK**Implementing Actions**

CR2.A Implement a citywide bicycle and pedestrian master plan to improve bicycle and pedestrian safety, and to encourage community members to walk and bike more often. Build on St. Helena's existing partnership with the Napa Valley Transportation Authority (NVTa) to ensure that the City's master plan is consistent with countywide transportation planning efforts. Coordinate with NVTa, Napa County, and property and business owners and seek funding to implement the improvements identified for St. Helena in the Napa Countywide Pedestrian Plan.

(Also see the following elements: Open Space and Conservation, Topic Area 2; and Parks and Recreation, Topic Area 6)

CR2.B Develop guidelines for the design, construction and maintenance of bicycle and pedestrian paths in St. Helena. Coordinate the guidelines with Napa County or regional trail connections.

CR2.C Require any new development and modifications to existing projects to provide bicycle and pedestrian improvements and amenities, consistent with adopted Engineering Standards and the St. Helena Bicycle Plan.

CR2.D Identify and pursue funding opportunities for bicycle projects on the local, state and federal levels. Update the existing and proposed bicycle system every five years, as required by Caltrans to qualify for Bicycle Transportation Account funding.

CR2.E Allocate funds and/or identify funding sources for pedestrian and streetscape improvements.

CR2.F Improve street crossings and gaps in the sidewalk system through development review and capital improvement projects.

5 circulation

topic area

2 COMPREHENSIVE PEDESTRIAN AND BICYCLE NETWORK

CR2.G Adopt a crosswalk installation policy to promote pedestrian safety and accessibility.

CR2.H Review pedestrian-vehicle collision data on an annual basis and identify areas for pedestrian safety improvements.

CR2.I Pursue state and federal grant opportunities to fund a Safe Routes to School program and other bike/pedestrian programs.

CR2.J Consider the feasibility of a citywide bike sharing program for municipal and/or public use.

CR2.K Require safe and accessible bicycle and pedestrian access for all newly-developed public facilities and sites.

CR2.L Enhance the pedestrian environment within the commercial area, and support the development of walking paths, multi-use trails, and bicycle trails throughout St. Helena with the goal of connecting to a countywide system. Encourage the use of group transit options in order to decrease tourist-generated traffic congestion. Encourage the use of pedi-buses by the school district to guide children safely and in a more healthful and sustainable manner to school.

5 circulation

topic area

3 SUSTAINABLE MOBILITY PRACTICES**Policies**

CR3.1 Provide incentives and encourage existing major employers to develop and implement transportation demand management (TDM) programs to increase the number of people who bike, walk, and take transit to work and reduce peak-period trip generation. Coordinate as appropriate with NVTa to implement strategies including the following:

- Transit subsidies or reimbursement to residents and employees (often referred to as “commuter check” or “EcoPass”);
- Car-share, car-pooling, and neighborhood electric vehicle programs to reduce the need to have a car or second car;
- Integrated bicycle parking and support facilities, primarily to reduce trips within the city;
- Modified parking codes to manage the supply of parking that generates frequent turn-over and serves multiple users; and
- Marketing and information programs to encourage alternative transportation modes.



CR3.2 Support the implementation of NVTa goals to reduce/restrain growth of automobile vehicle miles traveled (VMT).

CR3.3 Shift travel from single-occupancy vehicles to other modes so that by 2040, 45 percent of work trips by St. Helena residents and workers are by carpool, transit, walking or bicycling (see Table 5.5 at the end of this section for 2040 commute mode split targets).

Supporting TDM programs such as transit and car-sharing can reduce peak-period traffic.

topic area
3 SUSTAINABLE MOBILITY PRACTICES

CR3.4 Work with the wine and hospitality industries to manage congestion and create and promote car-free tourism services, coordinating as appropriate with NVTa on TDM strategies.

(Also see the Environmental Sustainability Element, Topic Area 2)

CR3.5 Work with the school district to increase the use of carpooling and the bus system to reduce drive-alone trips to St. Helena schools.

CR3.6 Support development of the bikeway and pedestrian networks to provide a convenient opportunity for at least 20 percent of commuters to get to work by walking or bicycling.

CR3.7 Support compact, mixed-use development as outlined in the Land Use and Growth Management and Housing elements.

TABLE 5.5: Commute Mode Split Targets for 2040

Mode	Commute Trips by Workers To and From St Helena	
	2016	2040 Goal
Drove alone	77.8%	N/A
Carpooled	3.8%	At least 20%
Transit	1.0%	At least 5%
Bicycle	2.6%	At least 10%
Walked	6.2%	At least 10%
Other means (including work at home)	8.6%	N/A
Source: American Community Survey 2016 Estimates		

5 circulation

topic area

3 SUSTAINABLE MOBILITY PRACTICES

Implementing Actions

CR3.A Study the feasibility of a citywide TDM program and review the effectiveness of the existing Traffic Impact Mitigation Fee.

CR3.B If deemed feasible, as part of the municipal code, require TDM measures for all new non-residential development.

CR3.C Regularly monitor progress toward increasing the number of residents and workers walking, biking, and using public transit.

CR3.D Work with the wine and hospitality industries, including the Wine Train, to manage congestion and create and promote car-free tourism services.

topic area

4 SAFE AND WELL-MAINTAINED CIRCULATION SYSTEM**Policies**

CR4.1 Ensure adequate maintenance of transportation facilities such as streets, sidewalks, and multi-use paths. Emphasize safety considerations, impacts on non-automobile modes of travel, and overall impact on long-term resource needs as maintenance priorities.

CR4.2 Ensure safety on residential neighborhood streets to promote walking and bicycling and preserve neighborhood livability.

CR4.3 Continue efforts to calm traffic and minimize traffic volumes and speeds in residential areas.

CR4.4 Strive to bring all pedestrian facilities into compliance with Americans with Disabilities Act (ADA) specifications.

CR4.5 Improve traffic safety and encourage walking and bicycling trips to St. Helena schools through a Safe Routes to School program.

5 circulation

topic area

4 SAFE AND WELL-MAINTAINED CIRCULATION SYSTEMImplementing Actions

CR4.A Review and update the Capital Improvement Program on a regular basis to identify and prioritize circulation facility improvements. Ensure that improvements support the goals, policies, and implementing actions identified in the General Plan.

CR4.B Develop strategies to calm traffic on streets that experience speeding or cut-through traffic, such as Starr Avenue. Include a range of solutions including enforcement, engineering, and education efforts to calm vehicle traffic.

CR4.C Establish a transition plan that identifies prioritization and funding mechanisms for improving street conditions to meet ADA specifications. Transition plans are an important part of meeting ADA standards.

CR4.D Pursue Safe Routes to School grants to improve safety and encourage bicycling and walking trips to St. Helena schools.

CR4.E To reduce the effect of regional traffic on local streets, monitor traffic volumes and speeds on potential regional cut-through routes, including Oak Avenue and Valley View Street and other problematic streets like Spring, Pope, Starr, etc. Due to the forecast potential for traffic volumes to increase on Oak Avenue and Valley View Street, the City shall consider installing traffic calming or traffic diverting devices to discourage regional cut-through traffic with the goal of ensuring that, over the duration of the General Plan, traffic volumes on these streets do not increase significantly.

CR4.F To ensure the multimodal Transportation Mitigation Fee (TMF) program serves as acceptable mitigation for the increase in traffic volumes resulting from build out of the General Plan, the City shall explore TMF programs within 6 months of adoption of the General Plan Update. As part of this effort, the City shall conduct a fee study to ascertain whether the fees designated under the



Street trees, sidewalks and signage are strategies to calm traffic on streets.

5 circulation

topic area

4 SAFE AND WELL-MAINTAINED CIRCULATION SYSTEM

existing fee program should be revised. As part of the fee study development, the City should consult with other local agencies, including Caltrans and the California Public Utilities Commission (CPUC), to identify potential improvements to Main Street beyond those currently under construction, and to at-grade railroad crossings that could be incorporated into the TMF program.

CR4.G The City shall consider the use of signal preemption for emergency response or evacuation in locations where Police and Fire Departments response times are not met.

CR4.H Connect Vallejo Street to Sulphur Springs with a fully paved street connection meeting the City's established Street Standards.

5 circulation

topic area

5 PARKING

Policies

CR5.1 Ensure an adequate balance of parking demand and supply. Closely manage and track parking supply within the downtown area by developing a parking management program and implementing a “park-once” strategy.

CR5.2 Maintain on-street parking and/or parklet on Main Street in the Central Business District for the convenience of shoppers and to provide a physical and psychological buffer between Main Street traffic and pedestrians.

Implementing Actions

CR5.A Develop a “park-once” strategy for visitors to improve air quality, reduce congestion, promote alternatives to driving alone, and educate and involve businesses and residents. Work with employers to encourage employees to park on the fringes of downtown, thereby leaving convenient parking spaces open for shoppers.

CR5.B Develop and maintain an off-street parking program for the City’s existing Parking Impact Area and consider modifying the boundaries of that area. The program will identify and prioritize locations where additional off-street parking can be provided. When sufficient funds have accumulated for the acquisition of a site and construction of parking on that site, commence with implementation of providing parking on that site.

5 circulation

topic area

6 IMPROVEMENTS AND PHASING**Policies**

CR6.1 Prioritize and implement improvements to the circulation system with an emphasis on bicycle and pedestrian improvements and expanded transit service.

CR6.2 Require concurrent infrastructure development for any new development projects that have impacts on the circulation system, including streets, paths, trails, sidewalks, and public transit.

CR6.3 Consider requiring dedications and mitigations in addition to traffic mitigation fees for any development that occurs adjacent to proposed street corridors in order to reinforce circulation system continuity. Traffic mitigation fees are necessary to mitigate existing traffic congestion and congestion caused by new development. Consider revising fee schedules to fund needed vehicular, bike, and pedestrian improvements in order to appropriately mitigate impacts. The fee schedule must be based on an established “nexus” between new development and the planned improvements.



On-street parking on Main Street is convenient for shoppers.

Implementing Policies

CR6.A Evaluate and prioritize all new paths and trails (identified in Section E: St. Helena’s Circulation and Mobility Future) when adequate funding is secured and concurrent with any new, adjacent developments.

CR6.B Keep up to date the existing St. Helena Traffic Mitigation Fee program to provide funding for all new road connections and trails included in the Circulation Element, in order to ensure new connections and trails are constructed in a timely manner.

5 circulation

topic area

6 IMPROVEMENTS AND PHASING

CR6.C Develop a plan for all non-motorized vehicles, including bicycles, pedestrians, and scooters. To create a meaningful alternative to automobile usage for short trips, multi-use paths should connect home-to-work or home-to-local shopping locations. Link neighborhoods and commercial areas on a path system and encourage active modes of transportation.



chapter ten
climate change

10 climate change



Community farmers markets provide opportunities to purchase locally-grown foods close to home, reducing the miles food travels to the table.

- 1 introduction
- 2 land use and growth management
- 3 economic sustainability
- 4 public facilities and services
- 5 circulation
- 6 historic resources
- 7 community design
- 8 open space and conservation
- 9 public health, safety, and noise
- 10 climate change**
- 11 housing
- 12 parks and recreation
- 13 arts, culture, and entertainment

10.1 Purpose of the Element

The Climate Change Element presents a framework to help the City respond to and plan for climate change. It aims to effectively address energy and water conservation, renewable energy production, transportation, sustainable business development, and the responsible evolution of the City to reduce climate change impacts in St. Helena. The policies and actions included in this element seek to chart a course that meets St. Helena's specific needs, aligning with the Napa Countywide Community Climate Action Plan Framework, which St. Helena participated in developing. The Climate Change Element includes the following sections:

The Climate Change Element:

- **10.2 Combating Climate Change in St. Helena.** Describes key climate change issues in St. Helena (p. 10-3).
- **10.3 Key Findings.** Identifies key findings based on an existing conditions analysis and extensive community outreach (p. 10-8).
- **10.4 Goals.** Defines overarching goals to guide policies and implementing actions (p. 10-11).

10 climate change

- **10.5 Policies and Implementing Actions.** Identifies policies and implementing actions to accomplish St. Helena's climate change objectives (p. 10-13).

10.2 Combating Climate Change in St. Helena

Climate change refers to a change in the average global climate that may be measured by wind patterns, storms, precipitation, and temperature. The term climate change is often used interchangeably with the term global warming. Global warming refers to an average increase in the temperature of the atmosphere near the Earth's surface, which can contribute to changes in global climate patterns. However, rising temperatures are just one aspect of climate change.

Greenhouse gases (GHGs) are gases that trap heat in the atmosphere and regulate the earth's temperature. This effect, known as the Greenhouse Effect, is responsible for maintaining a habitable climate. GHGs are released into the earth's atmosphere through a variety of natural processes and human activities. The current period of global warming is widely attributed to a buildup of GHG emissions from human-made sources that have proliferated and accelerated since the age of industrialization. Many scientists project that global temperatures will likely continue to increase in the future, raising broad concern about the effects of temperature change on the Earth's climate. Potential risks include rising sea levels, changing precipitation patterns, expanding desertification, and increasing GHG emissions.

Although debate continues about how the United States should engage in the global climate change discussion, many state and local governments have adopted policies to address climate change concerns. By adopting this Climate Change Element, St. Helena can take steps to forward the global climate change agenda at the local level. Moreover, as climactic conditions shift in the coming decades – potentially requiring policy responses unknown today – St. Helena will be in a position to adapt to and accommodate new federal, State, and regional planning requirements as they arise.



Canopies of urban street trees create shade and help enhance quality of life while mitigating the impact of the built environment on natural systems.

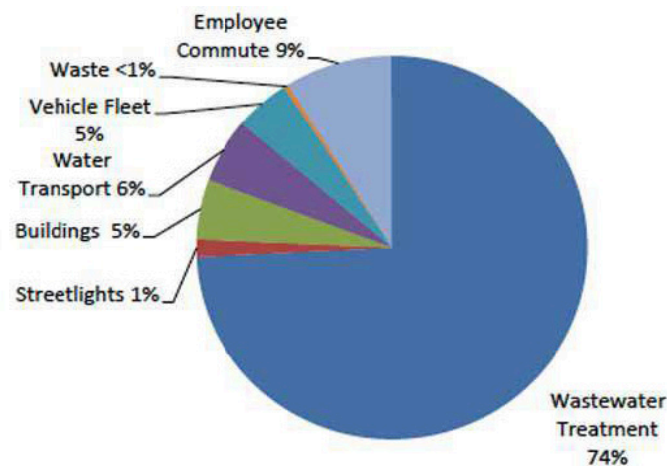
10 climate change



Innovative systems can capture and reuse rainwater and make use of rooftop spaces for agriculture or plantings.

St. Helena joined the International Council for Local Environmental Initiatives (ICLEI) in 2008. In coordination with ICLEI and the Climate Protection Campaign, the City developed the 2009 City of St. Helena Greenhouse Gas Emissions Reduction Action Plan Analysis Final Report. In 2012, the City completed a GHG emissions inventory of City-controlled operations and activities. Available data indicate that in 2010, the City of St. Helena municipal operations emitted 3,506 metric tons of equivalent carbon dioxide (CO₂e). Municipal GHG emissions varied by end-use sector, with water and wastewater operations and employee commutes generating the largest proportions of total emissions. The remainder of the City's GHG emissions included City buildings, vehicle fleet, streetlights, water transport facilities, and government-generated solid waste disposal.

Figure 10.1 Government Operations Emissions by Sector, 2010



In addition to the 2005 and 2010 municipal inventories, ICLEI developed 2005 and 2010 community GHG inventories for the City of St. Helena. A community inventory accounts for emissions from all emissions sources, not just from those sources under direct municipal control. According to ICLEI's modeling, St. Helena produced 43,831 metric tons of CO₂e in 2005 and 44,008 metric tons of CO₂e in 2010. In 2005, the largest sources of emissions were the

10 climate change

commercial/industrial sector (38 percent), residential (25 percent), and on-road transportation (22 percent). In 2010, commercial/industrial emissions remained the largest contributor of GHGs in St. Helena (35 percent), followed by on-road transportation (29 percent), and residential (25 percent) (ICLEI, 2012). Emissions were reduced in all sectors except the transportation sector, which increased 36 percent.

For the General Plan Update, an updated community GHG emissions inventory was compiled for the City of St. Helena using best available data and modeled for a baseline year of 2018. The inventory found that St. Helena's baseline emissions totaled 76,012 MTCO₂e. As shown in Table 10.1: 2018 GHG Emissions Summary by Sector (MTCO₂e), the transportation sector was responsible for the largest source of emissions, generating 44,531 MTCO₂e (59 percent). Electricity and natural gas use from the commercial/industrial sector was the second largest source of emissions, generating approximately 12,773 MTCO₂e (17 percent). Electricity and natural gas consumption within the residential sector was the third largest source of emissions, generating 9,890 MTCO₂e (13 percent).

In 2012, the City adopted a GHG reduction target of 20 percent below 2005 levels by the year 2020. This target is consistent with the State's goal to reduce California emissions to 1990 levels by the year 2020. In recent years, the State has also set a reduction

TABLE 10.1: 2018 GHG Emissions Summary by Sector (MTCO₂e)

Sector	Annual GHG Emissions (MTCO ₂ e)	Percent of Total
Residential	9,890	13%
Commercial/Industrial	12,773	16.8%
Transportation	44,531	58.6%
Solid Waste	3,734	4.9%
Water Transport, Distribution, and Treatment	138	0.2%
Wastewater	181	0.2%
Off-Road Equipment	4,631	6.1%
Public Lighting	37	>0.1%
Agriculture	97	0.1%
TOTAL	76,012	100%
<i>Source: Dyett & Bhatia, 2017.</i>		

10 climate change

CONCEPTS, TRENDS, AND IDEAS

Planning Regionally as a Solution to Climate Change

The single-largest source of greenhouse gases in California is emissions from passenger vehicles. This means that in order to reduce greenhouse gas emissions and reduce our contribution to climate change, California must revisit existing policies and the way communities are designed in order to reduce the number of vehicle miles traveled by the State's residents, therefore reducing vehicle emissions.

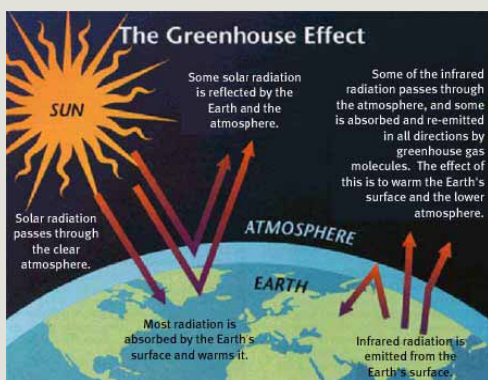
In 2006, the Governor signed The Global Warming Solutions Act into law to do just that. Often referred to as Assembly Bill 32 (AB 32), the Global Warming Solutions Act requires the State of California to reduce greenhouse gas emissions (GHG) to 1990 levels no later than 2020. In recent years, the State has also set a reduction goal of reducing GHG emissions to 80 percent below 1990 levels by 2050 (Executive Order S-3-05) and an interim target of 40 percent below 1990 levels by 2030 (Executive Order B-30-15). Additionally, the California Air Resources Board (CARB) Scoping Plan, adopted in 2017, establishes per capita GHG emissions targets of 4.0 metric tons of CO₂e per capita by 2030 and 2.0 metric tons of CO₂e per capita by 2050. These per capita targets are consistent with statewide reduction goals.

SB 375 takes AB 32 to the next step by requiring California's regional land use and transportation authorities to work with local agencies to achieve more compact growth patterns, thereby reducing the quantity of greenhouse gases emitted by passenger vehicles.



Although many Californians can picture the long-term dire consequences of climate change, there are also many near-term dangers to the state's wetlands as changing weather patterns affect wildlife habitats and life cycles.

10 climate change



The greenhouse effect has been studied for many years, but California is the first state in the nation to take specific action to combat the effects of greenhouse gas emissions.

SB 375 has five key features:

1. It mandates that regional planning agencies establish regional targets for reducing greenhouse gas emissions tied to land use, and therefore driving patterns.
2. It requires that regional planning agencies create a plan to meet those targets.
3. SB 375 requires that regional transportation funding decisions be consistent with this new plan.
4. It integrates regional transportation planning and housing allocation efforts for the first time.
5. It establishes new California Environmental Quality Act (CEQA) exemptions and streamlining for development projects that conform to the new regional plans.

The Sustainable Communities Strategy

SB 375 requires the California Air Resources Board (CARB) to establish GHG emission reduction targets related to transportation for each Metropolitan Transportation Organization (MTC) region by September 30, 2010. The Metropolitan Transportation Commission (MTC) is the designated MPO for Napa County and the greater Bay Area region.

Under SB 375, each MPO must then add a new element to its long-range Regional Transportation Plan (RTP) called a "Sustainable Communities Strategy," or SCS. The SCS seeks to achieve the targeted reductions in greenhouse gas emissions if there is a feasible way to do so, planning for compact growth and matching transportation improvements.

10 climate change

goal of reducing GHG emissions to 80 percent below 1990 levels by 2050 (Executive Order S-3-05) and an interim target of 40 percent below 1990 levels by 2030 (Executive Order B-30-15). Additionally, the California Air Resources Board (CARB) Scoping Plan, adopted in 2017, establishes per capita GHG emissions targets of 4.0 metric tons of CO₂e per capita by 2030 and 2.0 metric tons of CO₂e per capita by 2050. These per capita targets are consistent with statewide reduction goals.

Through Assembly Bill 32 and other legislation, the State is implementing measures that will reduce emissions by improving fuel efficiency in vehicles, reducing the carbon intensity of transportation fuels, increasing the use of renewable power, and other actions. However, local action is also needed to complement actions at the State level and ensure St. Helena meets its reduction target.

Targeting climate change policies to reduce vehicle miles traveled on local roads is essential to achieving the City's long-term GHG reduction goals. Moreover, strengthening policies to improve commercial and residential building efficiency, conserve energy, and eliminate organic waste from landfills can reduce community emissions. Within government operations, improving building efficiency, utilizing renewable energy, and replacing vehicles with more fuel-efficient models can significantly reduce GHG emissions.

In 2009, St. Helena joined with other Napa County jurisdictions to prepare the Napa Countywide Community Climate Action Framework. The Framework, adopted by the Napa Valley Transportation Authority (NVTa) in 2010, provides a consensus-based context for further planning efforts by the individual cities and towns. It outlines a suite of actions that, when translated into locally specific programs and projects countywide, will help meet climate protection targets. Many of the implementing actions contained in this Climate Change Element are based on the actions identified in the Framework.

10 climate change



Green jobs programs can help to build local capacity for solar installations and other energy saving strategies for homeowners.

10.3 Key Findings

There are several challenges and opportunities facing St. Helena related to climate change. The following key findings are based upon comprehensive existing conditions analysis and community input.

- St. Helena is currently implementing a program to reduce GHG emissions from City facilities based on findings in the City of St. Helena Greenhouse Gas Emissions Reduction Action Plan Analysis (Final Report April 22, 2009).
- The City of St. Helena municipal operations emitted 3,506 metric tons of CO₂e during the year 2010. Water and wastewater operations and employee commutes generated the largest proportions of total emissions 74 percent and 9 percent, respectively). Water transport facilities accounted for 6 percent of emissions, followed by City buildings (5 percent street lights (1 percent) and government-generated waste (less than 1 percent). By implementing measures for future action relating to building and equipment energy efficiency, fuel efficiency, alternative fuel options, and alternative energy generation, the City can make strides to meet its GHG reduction goals and be a model for other businesses and institutions seeking to reduce long-term emissions levels.

10 climate change



Innovative landscaping like rain gardens can beautify impermeable surfaces like parking lots while address water runoff concerns.

- The City participated in the development of the Napa Countywide Community Climate Action Framework, which contains 53 consensus-based actions intended to guide the participating jurisdictions in meeting GHG reduction goals. The collaborative process was managed by the Napa County Transportation and Planning Agency. A 2006 Bay Area Air Quality Management District (BAAQMD) report indicated that approximately 55 percent of GHG emissions in Napa County resulted from mobile source emissions. Effective land use planning that reduces vehicle miles traveled and promotes alternate modes of transportation is essential to mitigating climate change. By focusing on improving bicycle and pedestrian connections across the City and reducing commute and truck trips, St. Helena can address auto-related emissions levels at both the local and regional levels.
- St. Helena's estimated 2018 baseline community-wide GHG emissions totaled 76,012 metric tons CO₂e, and emissions were 13.0 MTCO₂e per capita for the residential population and 6.7 MTCO₂e per service population. Transportation emissions make up a significant portion of St. Helena's emissions (59 percent), with commercial/industrial energy use in second place (17 percent), and residential energy use in third (13 percent). Commercial/industrial and residential emissions have decreased since 2010. Transportation emissions appear to have significantly increased since 2010, however, this is due to a change in the methodology in accounting for VMT within the GHG inventory to be consistent with best practices and protocols.
- Over half of community-wide emissions in St. Helena result from on-road vehicles. Effective land use planning that reduces VMT and promotes alternate modes of transportation is essential to mitigating climate change. By focusing on improving bicycle and pedestrian connections across the city and reducing commute and truck trips, St. Helena can address auto-related emissions levels at both the local and regional levels.
- Like other communities throughout California, St. Helena is vulnerable to water shortages in the event of prolonged period of drought that could be exacerbated by climate change. Fully integrating water resource conservation policies and implementation measures into the City's Climate Change Element is essential to ensuring that St. Helena will have adequate water supplies to meet its future needs.

10 climate change



- A significant portion of St. Helena's economy relies on industry sectors that may be adversely affected by climate change, most importantly agriculture and tourism. By considering the water supply in future climate change scenarios and supporting measures to recycle and reuse water as much as possible in the near future, the City can begin to strengthen the viability of its industries, markets, and employment into the future.

Creating walkable streets and shopping districts can help to reduce dependence on automobiles as residents and visitors walk and bicycle more.

10.4 Goals

The goals of the Climate Change Element are:

Increase Citywide Transportation-Related Energy Efficiency.

The City seeks to reduce demand for fossil fuels by decreasing VMT, improving transit options and the fuel efficiency of vehicles, supporting the use of renewable energy-powered vehicles, and creating a bicycle and pedestrian-friendly environment.

10 climate change

Reduce Energy Demand Through Improved Building and Design.

St. Helena is dedicated to reducing energy demand by promoting development and construction that improve resource conservation and efficiency, and to improving the energy supply by switching from fossil fuels to renewables.

Reduce Consumption and Divert Waste.

The City is committed to achieving waste diversion of 75 percent to 90 percent by year 2020.

Ensure the Sustainable Management of Agriculture, Natural Resources, and Urban Forests.

St. Helena is dedicated to protecting and increasing the amount of vegetation and biomass in local soils, reducing emissions from agricultural sources, encouraging responsible and sustainable agricultural and landscaping practices, and significantly reducing water use to protect local water resources.

Increase Community Engagement and Advocacy.

The City seeks to increase participation in GHG reduction efforts through marketing programs and community outreach. In addition, they are committed to engaging and advocating for collaborative policy and legislative solutions at the local, regional, state, federal, and global levels.

Improve the Efficiency of Local Government Operations.

St. Helena is dedicated to reducing fossil fuel consumption by local government operations, improving the energy efficiency and reduction of carbon emissions of City and County facilities and operations, and reducing solid waste attributable to City and County operations and facilities.

10 climate change

10.5 Policies and Implementing Actions

A range of policies and implementing actions are outlined below and organized into the following topic areas:

1. Transportation and Mobility;
2. Buildings and Energy;
3. Consumption and Solid Waste;
4. Agriculture, Natural Resources, and Urban Forests;
5. Community Engagement; and
6. Local Government Operations.

The following policies and actions mandate, encourage, or allow certain initiatives to be pursued throughout the duration of the General Plan. Together they serve as strategic directions for City staff and partners, highlighting where time and resources should be focused. They reflect St. Helena's commitment to coordinating its climate change measures with countywide efforts to address climate change.

10 climate change

topic area

1 TRANSPORTATION AND MOBILITY

Policies

CC1.1 Promote a “walkable” and “bikeable” city.

CC1.2 Support transportation planning efforts to optimize fuel efficiency and reduce vehicle miles travelled on local roads.

CC1.3 Seek initiatives that provide efficient modes of transportation for visitors and residents.



TOP California's rail system provides regional transit connections throughout the state.

BOTTOM Innovative solutions for parking lots can create self-sustaining spaces with less impact on the natural environment.

10 climate change

topic area

1 TRANSPORTATION AND MOBILITYImplementing Actions

CC1.A Adopt and implement pedestrian and bicycle networks within St. Helena that may connect to a countywide multi-use trail that extends from Calistoga to American Canyon.

CC1.B If feasible maintain and enhance existing express bus, local bus, and para-transit services. Provide shuttle service between the three upvalley towns. Support the establishment of a northbound express bus during peak commute hours. Ensure that these services provide opportunities to connect with existing and proposed countywide service improvements, including the transit center in Downtown Napa.

CC1.C Expand Park and Ride areas and other support facilities to encourage public transportation use and car and van pooling.

CC1.D Evaluate truck and freight rail routes through the city. Based on these findings, develop policies and strategies to improve circulation and neighborhood compatibility issues.

CC1.E Adopt and implement transportation plans in accordance with the Napa Valley Transportation Authority's (NVTa) Strategic Transportation Plan to increase transit service and ridership in St. Helena and connections with County transit services.

CC1.F Establish programs to reduce vehicle miles traveled by supporting local hiring, food production, farmers' markets, and community-based "buy local" campaigns. For General Plan purposes, "local" includes St. Helena and its residents, as well as the residents and areas of the surrounding towns and unincorporated County that have traditionally been served by St. Helena's commercial and retail services.

10 climate change

topic area

1 TRANSPORTATION AND MOBILITY

CC1.G Evaluate parking standards to help reduce vehicle miles traveled and reduce vehicle idling.

CC1.H Increase walkability and bikeability to encourage a reduction in local auto trips. Strengthen outreach to increase awareness of pedestrian and bicycle amenities throughout the city.

CC1.I Require discretionary development projects to assess and mitigate the impacts of vehicle miles traveled using transportation demand management programs, including providing transit amenities.

CC1.J Initiate programs that encourage car-free tourism through incentives, outreach, awareness, and creating a bicycle and pedestrian-friendly environment.

CC1.K Adopt and implement programs to assist businesses and organizations switch from fossil fuel-powered fleet vehicles to vehicles powered by clean, renewable energy sources.

CC1.L Develop parks and open spaces in support of efforts to create walkable, bikeable mixed-use neighborhoods, especially to complement higher-density development and connect lower-density areas.

CC1.M Design and operate the public street system to optimize fuel efficiency. Consider fuel efficiency in the design of street extensions, connections, and right-of-way controls at intersections, and monitor and adjust traffic signals.

10 climate change

topic area

2 BUILDINGS AND ENERGY**Policies**

CC2.1 Encourage measures to reduce energy demand through conservation and efficiency.

CC2.2 Support local efforts to improve the energy supply by switching from fossil fuels to renewables.



Transit agencies in some parts of the state are building their fleets with buses that use natural gas and other alternative fuel sources.

Implementing Actions

CC2.A Partner with the County of Napa to implement an AB811 program that makes funding available to residential and commercial property owners seeking to improve their properties to conserve energy and water, and to generate solar energy.

CC2.B Pursue state and federal funding programs designed to reduce energy demand through conservation and efficiency.

CC2.C Implement Title 24 energy conservation standards for new buildings, and other State building code standards for high performance “green” buildings. Utilize established green building standards, such as Leadership in Energy and Environmental Design (LEED) and Build it Green.

CC2.D Continue to reduce energy use by promoting domestic water conservation and requiring water-efficient landscape improvements associated with new construction.

CC2.E Reduce greenhouse gas emissions from buildings and energy use. Require or request that new development projects analyze greenhouse gas emissions due to energy use and incorporate energy and safe yield water conservation measures into projects.

10 climate change

topic area

2 BUILDINGS AND ENERGY

CC2.F In support of countywide energy generation efforts, increase local renewable energy generation. Adopt production standards for the City based on quantifiable measures that increase per capita generation levels.

CC2.G Remove regulatory impediments and economic disincentives associated with the generation and use of energy from renewable sources, such as wind, geothermal, and solar energy.

CC2.H Establish programs that encourage owners to retrofit existing structures to incorporate energy-efficient and "green" building standards.

(Also see the Community Design Element, Topic Area: 1)



New building technologies make it possible to reduce energy consumption and generate new energy using solar, wind, and water sources.

10 climate change

topic area

3 CONSUMPTION AND SOLID WASTE**Policies**

CC3.1 Enhance recycling, composting, and source reduction services for residential and commercial uses to support Napa County's countywide waste reduction goal to achieve overall waste diversion of 75 percent to 90 percent by 2020.

(Also see the Public Facilities and Services Element, Topic Area: 4)

Implementing Actions

CC3.A Establish programs and create incentives to achieve a 75 to 90 percent citywide construction and demolition debris waste diversion level in support of Statewide goals.

CC3.B Establish programs and create incentives to achieve a 75 percent organic (food and green) waste diversion level in support of statewide goals.

CC3.C Establish citywide collection services for segregated food waste from commercial sources.

CC3.D Encourage home composting of organic waste.

CC3.E Create and support other programs, such as the Napa County Green Business Program and the green restaurant program, that help achieve the 75 to 90 percent overall waste diversion goal.

CC3.F Adopt environmentally-preferable purchasing measures and explore joint-purchasing agreements with partner agencies and businesses.

10 climate change

topic area

4 AGRICULTURE, NATURAL RESOURCES, AND URBAN FORESTS**Policies**

CC4.1 Support efforts to protect and increase the amount of vegetation and biomass in soil and reduce emissions from agricultural sources.

CC4.2 Encourage responsible and sustainable agricultural and landscaping practices.

CC4.3 Strengthen water conservation measures that result in significant reductions in local water use and the protection of local water resources.

(Also see the Community Design Element, Topic Area: 1)

CC4.4 Support efforts to expand and improve the City's managed urban forest in order to reduce greenhouse gas emissions and improve overall air quality.

(Also see the Open Space and Conservation Element for additional policies and implementing actions relating to urban forests.)

CC4.5 Promote community gardens to reduce emissions generated in food transportation.

Implementing Actions

CC4.A Establish programs to support and encourage local agriculture, food production, and school and community gardens.

CC4.B Promote edible landscaping where possible.

CC4.C Establish programs and plans that create and enhance urban forests and greenways.



Wind turbines offer new opportunities for climate-friendly energy generation.

10 climate change

topic area

4 AGRICULTURE, NATURAL RESOURCES, AND URBAN FORESTS

CC4.D Assess the impact of land use changes, new vineyards, and urban development on carbon sequestration.

CC4.E Support efforts by local growers and restaurants to produce and use locally-grown food and remove associated regulatory hurdles.

CC4.F Revise ordinances to further protect habitat and mitigate the conversion of oak woodlands, natural resources, riparian habitat, and other important natural communities by permanently protecting similar habitats.

CC4.G Support and promote the Napa Green Certified Winery Program and the Napa Green Certified Land Program.

CC4.H Adopt landscape ordinances that promote drought resistant plants, and limit or restrict lawns and other high-water-demand plants unless irrigated with reclaimed or grey water systems.

CC4.I Develop and adopt energy-saving and environmentally-sound domestic water conservation plans.

CC4.J Establish an urban forestry program to ensure a coordinated and comprehensive approach to maintaining and increasing the City's trees especially native varieties when possible.



TOP Local gardens help reduce the footprint of fruits and vegetables.

BOTTOM A boatload of trash illustrates how much waste enters natural ecosystems.

10 climate change

topic area

5 COMMUNITY ENGAGEMENT**Policies**

CC5.1 Support local efforts to market programs and conduct community outreach through schools, non-profit groups, community organizations, and the business community to increase participation in greenhouse gas (GHG) reduction efforts.

CC5.2 Engage and advocate for collaborative programs, policies, and legislative solutions at the regional, state, federal, and global levels to reduce global GHG emissions.

CC5.3 Expand local awareness about gardening, composting, and agriculture.



Incentives programs can help to encourage everything from green roofs to composting and recycling to reuse of materials.

Implementing Actions

CC5.A Partner with the St. Helena Unified School District, private schools, community-based non-profit organizations, and others to undertake public outreach and education efforts that broaden community involvement in reducing greenhouse gas emissions.

CC5.B Market and encourage participation in incentive programs that improve energy efficiency.

CC5.C Foster and build public-private partnerships that help achieve greater energy efficiency and reduce greenhouse gas emissions.

CC5.D Promote programs designed to advance sustainable business practices in St. Helena. Use the Napa County Green Business Program as a model for a City-based effort.

CC5.E Participate in and help develop effective regional, state, and federal solutions to reduce emissions.



10 climate change

topic area

5 COMMUNITY ENGAGEMENT

CC5.F Engage and assist local agencies and utility companies toward achieving greenhouse gas reduction targets.

CC5.G Enable long-term solutions by investing in and supporting science and engineering education.

CC5.H Support the United States' participation in international greenhouse gas reduction efforts.

CC5.I Establish an outreach program to raise public awareness about gardening, composting, and agriculture. Utilize public access television, the City's website, public notices, and workshops to engage a broad and diverse range of residents.



Farmers markets and community gardens provide residents with direct connections to the food supply.

10 climate change

topic area

6 LOCAL GOVERNMENT OPERATIONS**Policies**

CC6.1 Ensure that the City leads by example in managing its local government operations while implementing the following policy directions:

- Encourage the reduction of fossil fuel consumption by local government operations.
- Improve energy efficiency, implement alternative and renewable energy solutions, and reduce greenhouse gas emissions in City and county facilities and operations.
- Reducing solid waste from City and County operations and facilities.

**Implementing Actions**

CC6.A Transition City fleets to vehicles powered by clean, renewable energy sources.

CC6.B Install electric vehicle charging stations with funding from state and federal sources.

CC6.C Encourage alternatives to agency employees' use of single-occupancy vehicles by providing bicycle racks, preferential parking permits for carpools and vanpools, commuter information, and other incentives.

CC6.D Conduct audits and regularly monitor the effectiveness of City and County energy efficiency implementation measures and adapt them to meet targets.

CC6.E Convert street lighting, water pumping, water treatment, and other energy-intensive operations to more efficient technologies.



Community programs can help engage both adults and children in learning about their environments and about the impact of greenhouse gas emissions on the climate.

10 climate change

topic area

6 LOCAL GOVERNMENT OPERATIONS

CC6.F Ensure that new municipal or substantially-renovated municipal facilities incorporate cost-effective strategies for reducing greenhouse gas emissions, conserving energy and water, and utilizing sustainable construction practices.

CC6.G Consider carbon emissions from the production, transportation, use, and disposal of goods as a criterion for City purchasing decisions.

CC6.H Establish a comprehensive, user-friendly recycling program that involves all City departments and facilities. Recover 70 to 85 percent of all waste generated in City operations.

CC6.I Install renewable energy systems at City facilities.

CC6.J Review and update the implementation actions recommended by the City's Climate Protection Task Force (CPTF) on an annual basis.



Collaboration between governmental entities, residents and community groups ensures that actions have significant impacts.