



Community Service Provider

Focus Group

Thursday, May 17

Long Valley Garden club

Participants:

John Leung, County Planning Team

Chris Johnson, Manager of Bank of Willits, Harwood Park Board of Directors, Healthy Start

Dusty Duley, Mendocino County Planner

John Pinches, 3rd District Supervisor

Kerry Foltz – Laytonville Water District

Verna Cox – Long Valley Health Center Board of Directors

Tom Allman – County Sheriff

Phil Dow – Director MCOG. Involved in county-wide transportation issues.

Roland Spence – Laytonville Skate Park

On Waste Water Treatment...

- County Supervisor believes that waste water treatment plant is not coming (due to cost feasibility) and is not an impediment to growth. Politically its not going to fly. Would impact drinking water standards in ten Mile Creek. Septic maintenance failure is #1 issue for contamination. Ground water table is another environmental constraint. Investors are what is needed – do a better job of attracting private investment. Two lane Willits by-pass will put a focus on Laytonville businesses. Bank and Park'n Takit is all on one system, as an example of clustered systems.
- There is an opportunity for alternative sewer system and clustered housing. The lack of sewer stops people dead in their tracks, instead of looking at the community gain from new housing.

- Lack of waste water treatment is an issue for the Health Center as they think about expanding facilities and providing housing. The Health Center is interested in cooperating with others to solve the issue.
- The County Sheriff mentioned that Laytonville needs sewer treatment, although it would open the door for unchecked growth and threaten the charm.

On Economic Development...

- Need to make the community work for the kids...they need jobs and housing and opportunity. Economic opportunity and businesses are key. When the Willits bypass goes through, so the first stop north of San Francisco will be in Eureka, with traffic slowing in Laytonville – the major opportunity for Laytonville.
- There is consensus is that growth is needed, use planning tools to guide it. Need an economic base to support county services, schools and employment.

- The County Planning Team is hearing the same issues about youth needing something to do. The County and Laytonville needs leeway to grow, and yet we don't want to be another Santa Rosa. The Ukiah community found that how the design of growth happens is the most important issue. Strategies like compact growth, clustered housing, second units can be solutions.

On the transient issue ...

- The transient issue is perceived to be due to the illegal economics of this region. They are trashing Harwood Park. Businesses are clearing bushes, taking out benches. Causes people not to come to bank/businesses. Removing the benches has alleviated some of the problems in front of the bank.
- County Sheriff quoted a local business person "for the homeless person, the road to Laytonville is a one-way street". We

have camping and trespassing ordinances to help regulate, but a public place is a public place. The problems in Laytonville are the same in Covelo, Ft. Bragg and Gualala. The transient problem in Laytonville got really bad 3 years ago following the High Times article advertising trimming (marijuana) work in Laytonville. It's going to take something other than law enforcement to address the issue. Illegal marijuana is rampant, and there is legal marijuana as well. There is a current Board of Supervisors proposal to address the issue. Sheriff's office will distribute zip ties to medical patients and care providers...allowing law enforcement to do their job better. There is more marijuana in long valley than any other place is Mendocino County. Most of it is medical marijuana.

On the youth issue...

- We need to provide an environment for youth to have meaningful work and social engagement.
- The youth need something to do other than basketball, rodeo, or trimming dope. The skate park needs a downtown location to be donated. Skate parks bring in business. Healthy Activities for Local Teens (HALT) at Healthy Start program has hired Roland to bring kids to skate park in Willits after school. Healthy activities for kids after school keeps kids away from alcohol and drugs. Graffiti is not an issue at skate parks, as at the Willits Skate Park, any graffiti closes down the park, so it is a responsible, self-policing community. The Long Valley Skaters Association has raised \$9,000 in donations for skate park. The Association is working with the Parachute Project, an organization started to help people in need of medical treatment, and

transferred tax exempt status. Once they hit \$15,000, they will begin asking for matching funds. Funding likely to come from County, State, and private foundations (Tony Hawk Foundation). Skate parks can become a destination and bring in revenue.

- The County Sheriff added that the skate park in Willits is constantly utilized, it brings in out of state people, skate park becomes a destination point. Brings in tax dollars. Willits spent \$600,000 (does not include cost of land). There are 20 – 50 people at all times and parents are spending time with kids at the skate park.

Seniors Focus Group

Thursday, May 17 11:30 – 12:30

Long Valley Garden Club

Participants:

- Gene Swartz
- Louie Fresquez
- Jan Seeley
- Maryanne Adkisson
- Michael Nabong
- Susan Bradley

What do you like about Laytonville?

- Small and rural
- Beautiful
- We live in paradise, and would like to see improvements
- Can see and breathe on a regular basis
- It’s beautiful get away from pollution and chemicals. Greatest loves are wildflowers and birds. Watched how her previous community was ruined by unchecked growth. We don’t need to bring

in anything else, we just need to market what we’ve got.

- Have lived here 42 years and felt welcomed here, even as a single person. Came from suburban area and this was like heaven to me. I love the character of the valley. It keeps our kids in “the cradle” and they don’t get out of here, but that doesn’t mean we want to bring the world here. Localization is the key... starting small businesses and farms to support community. I’d like to see everyone doing that...orchards, gardens, value-added products. We are concerned about development, but we need local affordable housing to attract service people. And walking options for transportation. The ability to expand will take development of the downtown area, and we should keep it compact.

What issues do you think are appropriate to retired people?

- Like to see more sidewalks. Walking up Branscomb is sort of like taking your life in your hands. We need better lighting

outside of downtown.

- Ten years from now the kids are going to take away our drivers licenses. How will we handle our lives then? Unless Laytonville provides housing of some kind...cluster housing or something... we’ll probably have to move to Willits. We don’t want to move to Willits. Where we live now, we have to drive to everywhere.
- We don’t want to leave our property. We intend to die there. It will involve ridesharing or some other form of public transportation. Even nice trails to walk, shortcuts.
- Because we are in our cars so much, we don’t get enough exercise. We should have trails and bicycle paths.

What are your favorite places to walk?

- There is a beautiful trail at the back of the park.
- The favorite walk (exercise walk) is around the subdivision in downtown be-

cause it is exactly a 1 mile loop. Foster to Harwood to Willis to Ramsey.

- Harwood Road is not safe. Kids ride horses along Harwood and Branscomb Rd.

What do you think Laytonville needs?

- We've been doing some talking recently because we want to give service to the community...like outdoor movies at the garden club.
- We need a swimming pool.
- We need a recreation center for young and old.
- What we need is trees and landscaping. We need a tree ordinance to protect what we've got.
- When I was a kid, we did a lot of hunting, fishing, walking, riding bikes. At that time there was a lot of sawmills and

work in the woods. I started working in the mill part time when I was 13. There used to be so many trees in this valley... oaks and pines....they just keep cutting them down.

- We need more nurturing things for the kids that are here and we need jobs for them.
- We used to have a strong ROP program where kids can learn building and trades skills. They built the garden club building. For example, the most popular class at the high school now is a guitar making class.

What was the school like when you went to school here?

- There were about 12 in our class. Our shop class built the shop, we went on to build a couple of houses in the community. There was a welding shop and an auto shop.

- Laytonville USD de-unified (from Wil-lits) in about 1980. Schools should be community resources. We would like to have more local control over our schools.
- The old campus needs to be opened up for community use.
- There are distinct housing needs in this community: the need for clustered housing for seniors, affordable housing and shelters for homeless families.
- Too often towns and cities use ordinances to push social issues (homeless, drug use) under the table.

If we were going to have a community gathering space in Laytonville, do you think it would be a magnet for homeless?

- We need to balance the needs: there are homeless, young, the elderly.
- We could have an area for a public farm-

ers market, community dinners. Something besides Harwood Park, which is way back away from the community.

Would you like to share any other ideas?

- Part of the problem with developing a community kitchen is the County codes for a code kitchen. The lack of waste water treatment is at the center of it. There are ways to do this that will not affect our environment. For instance, in Arizona, CO, NM, there are closed circulating waste water treatment systems.
- Sewage is a problem here, its raw and unsafe.
- Cross walks need to be safer. Time after time people have been killed.
- There needs to be a better crossing on Branscomb between the Health Center buildings. We need a crosswalk and a sign.



Focus Group
Downtown Business Owners & Property Owners
May 17, 2007 1:30 – 3:00
Long Valley Garden Club

Participants:

- Kimber Holmes – Biofuel Station and Mini Storage
- Sheila Larson – Boomers Bar and Grill
- Mary Polson – on title with Boomers
- Phil Gravier – Chevron
- Calvin Harwood – Laytonville Trailer Park, large parcel access from Ramsey, Willis, and Branscomb Rd.
- Shannon Ford – Tire and Auto
- Michele Hill & Joe Hill – property next to Bio-fuel station
- Kent Westwood – Coastal Mountain Mortgage and Long Valley Roadhouse
- Albert Repovsch – Albert’s, Rodeo

What issues are foremost in your minds?

- Small Vision is to come back to state of

Laytonville in 1964. There were beautiful planter boxes with flowers and apple trees. It lasted for about a year. The kids vandalized it. I’d like to see flowers, trees, and continuity.

- The two-lane Willits bypass will impact our community – we need to be prepared to accommodate them. They will be passing services in Willits...its not so much new people.
- Branscomb Rd. and Highway 101 is a potential traffic problem. Left and right turns are dangerous, especially during holiday weekends.
- There was a feeling that its inevitable to have a stoplight. Would like to reduce speed limit to 25mph. Slowing traffic is a key issue.
- It is common to see speeds of 55 mph at Chevron. Semi trucks pulling in and blocking business is a major issue at Albert’s and The Biofuel Station.
- Used to be a 25 mph sign in town...would be good to get it again.

- A better sense of beginning and ending to town (gateway) would be helpful in slowing traffic. Possible southern location between George’s Granite shop and Calvin’s trailer park. North location: at Gravier’s Tire and Auto.
- Slowing the speed limits help people observe businesses and stop and spend money.
- One of the challenges to development is the lack of waste water treatment. Commercial space in downtown has to be set aside for leach field and alternative leach field.
- Calvin is fine with having the waste water treatment facility on his site for future residential development. Any new development is going to put pressure on Branscomb Rd.
- Laytonville needs murals and a spot for artists, there is not place to show off the art from the great artists in our downtown. There are county grants for murals and designers come with it!

- A Chamber of Commerce would help provide some continuity (Planter boxes)
- Concern about vandals.
- Public restroom is needed....respite area and dog run.
- The lot behind Park N Takit (Bailey's property) would be a great place for a plaza. It is not a leach field. It's central to services, post office, schools.
- We need to pull people off the highway to support the businesses. Do we want unbranded, unnamed businesses off the highway? Or do we want some recognizable business names?
- How do we get people shopping more locally? Slowing down the traffic.
- Amenities that are desired include a millery w/ bakery, restaurants, housing, center place to park.
- The 80' centerline setback from Highway 202 is a hurdle to creating good people spaces, building up to the highway.
- The buildings are so spread out due to

the leach lines. Intensifying development in the downtown would create a more friendly people place. Eventually the property values will support intensification.

- Cottage Industry or Light Industry zone to promote/manufacture local products

What are your ideas for short-term and mid-term solutions for the downtown?:

- Trash cans, recycling containers.
- Nice sidewalks, easy parking.
- Signage for parking
- Town restroom & plaza
- Skate park land designation
- Gateways

What are Indigenous Design Elements in Laytonville?:

- Blue Rock
- TanOak
- Redwood

- Lumber Forests
- Madrone
- Face planter boxes with rock
- Boomer's Building - western theme w/ mezzanine
- Coastal Mountain Mortgage tried to play on western theme
- "homey" feel
- An emphasis of People

*Youth Focus Group
Laytonville High School
Friday, May 18*

Participants:

Fifteen students participated.

- 3 people lived in the map area. 2 people walk to school. The remainder drive to school.

How do you get around Laytonville?

- We need sidewalks and trees, making it easy to get around...make it welcoming.
- The sidestreets are too out of the way to walk on. At lunch time, kids walk on the highway, even if they drive to school. They go to Geiger’s, Good Food Store, and the Chief for lunch.
- Truck drivers are not polite to the girls walking along Branscomb.
- Middle schoolers ride bikes more than high schoolers.
- From Harwood Park to Mulligan Ln.

there is an informal trail. The trail in the park needs a bridge for horses and bikes.

- FFA program to help get a horse trail and horse facilities here. Kids estimate 40 – 50% of kids have horses and 10 horses would come to school a day.
- Bridge and shoulder at curve in road, because banking pushes the drivers to the outside of the road.

How could Laytonville be improved?

- We need streetlights.
- Ramsey Rd needs improvements.
- Take down the blue building at Dos Rios and Highway 101.
- Fix the Scary Places:
 - Improve bathrooms at Harwood Park – cleaner, more light. The park is an important part of the community, little league games, rodeo, dog walking, hanging out around Healthy Start. Need to clean up broken bottles, needles, dirty hippies.

- Behind Park N’Takit

If you could have anything in town, what would you want?

- Arcade
- Skate Park
- Movie Theatre
- Swimming Pool
- Community tennis courts
- Need a track – currently run along Branscomb Road.
- Paintball course at old high school. Sell CO2 refills here (instead of going to Wil-lits)
- If there was a skate park: 25% would use regularly
- Movie Theatre: 100% of kids would use it
- Arcade: 25% of kids would use it

- Swimming Pool: 50% of kids would use it
- Tennis Court: 90% of kids would use it
- We need better stores:
 - Prices too high, so we shop in Willits
 - Boomers is closed to people under 21
 - We need sporting goods store to support athletes (track, football,
 - Tack store
- We need Jobs. Housing is an impediment to living here. It would be nice to have some new people in this town, but the right people. It would be great if people could go off to college and then return to Laytonville, get housing and a job.
- We want to see beautification:
 - Sidewalk art
 - Murals
- Welcome sign kiosks.
- Greenery in front of GFS and Shady Nook
- Planter Boxes
- Fix up area in front of bank
- Revive the Xmas tree lighting (in front of Coastal Mountain Mortgage) with hot chocolate, cider.
- Motels need to be improved.
- Use talent of graffiti artists
- Fix up old high school....make it into community center
- Sign for Laytonville High – “home of the warriors” on 101 with a sign pointing down Branscomb.
- Big Kiosk in town on 101 (at bank park) with town calendar and school events...the woodshop could do it.
- The high school woodshop can build

Tribal Focus Group Notes

Friday, May 18

Cahto Rancheria Community Center

Participants:

Robert Bell
Kelley Frazier
Terri Youngren

Are transportation needs on the Rancheria met?

- Route from feed store to Rancheria along Branscomb should be improved. We also use Coyote Trail...traditionally Cahto Creek to Tenmile Creek (behind ballpark).
- Kids get to school on bus, but most are driven to school.
- There is a MTA stop at Tribal Admin Center and around Reservation Road.- two morning pickups.
- The horse crossing on Branscomb Rd.

Bridge is scary.

- Kelley was hit by a car last week on Branscomb Road at a narrow shoulder.
- Priority safety concern is the corner on Branscomb. Is it possible to bypass the corner with the trail, possibly using Ten Mile Creek?
- Suggested grade sign on Branscomb between Stump Rd. and Reservation...that is a bad spot for wrecks. Take the grade down on Branscomb to eliminate the dips between Mulligan Lane and Feed Store (at north Road.)
- Crosswalk visibility is an issue along Branscomb.
- There is a lack of transportation options on the reservation. We don't have mail delivery on the res, so everyone has to get to town to get mail.
- Have stores off of HWY 101. Create a parallel route to 101 behind fosters, through corner of baseball diamond, to backside of bank and connecting into Foster. Could be a ped route, alley. Cre-

ate a “back” to compliment the “front”.

Is there any cultural information would like to share with us?

- We The Rancheria was purchased for Indian families. Originally families were from Cahto Mountain, Mud Springs, Ten Mile River. They were hunters and gatherers, and fisherman.
- Coast walk...traditional walk from inland to coast. 50 villages along ten mile. Along Ten Mile Creek was known as the “Land of 50 villages”.
- Cultural elements: Plaza/info center with flagpole would be useful for our gatherings. Fundraiser to get flag pole raised in name of Native American veterans. Potluck gatherings bring 30 – 100 people.
- There is a feeling that the Reservation is a distinct community from Laytonville.
- Cahto best known for baskets.
- There is interest in a sweat lodge, and medicinal gardens. Traditionally, sweats

were related to hunting.

What issues are you concerned about in town?

- The right hand turn from Branscomb onto 101 is a “zoo”. Often, we use Willis to Ramsey as an alternative.

Branscomb Road Walkway: Highway 101 to Reservation Road Improvement Concept

The following report was prepared during the development of Laytonville's Downtown Revitalization and Traffic Calming Plan. The analysis and recommendations are based on observations made by the project consultant team, as well as information gathered during field surveys, community workshops and public walking tours. The consultant team, led by Design, Community & Environment in partnership with Fehr & Peers Associates, conducted a series of walking and van tours throughout the Project Area with community members and local stakeholders to discuss common concerns and ideas about existing circulation patterns. Held in conjunction with the Caltrans-funded Laytonville Design Fair, the walking and van tours provided the consultant team with a strong understanding of local pedestrian, bicycle and equestrian circulation patterns. The tours provided commu-

nity members with an opportunity to identify potential pedestrian-vehicle conflict points, priority locations for pedestrian safety and traffic calming improvements, and desired pedestrian-scale amenities directly in the field. This report describes the existing conditions and potential improvements for a walkway extending from Route 101 to Reservation Road along Branscomb Road. Located about 1,000 feet west of Route 101 is Laytonville High School. The High School is located on the north side of Branscomb Road. As implied by the name, Reservation Road provides access to the Cahto Indian Rancheria. There are 188 (2000 Census) residents on the Laytonville Rancheria, many of whom are school age. An informal footpath has developed over time connecting the Reservation to the High School. The footpath generally follows the outside of roadway curves, presumably

to maximize corner sight distance. Since Branscomb Road has five curves between the Reservation and the High School, the path changes sides of the road several times. The County has installed marked crosswalks, consisting of two 12-inch white lines at multiple locations. Some of these locations have limited sight distance due to vertical curves as well as horizontal curves (hills).

Project Design Parameters

Although there is demand for pedestrian, bicycle and equestrian travel along Branscomb Road, the primary goal of this effort is to provide a basic walkway. While inexperienced bicyclists (experienced bicyclists would likely ride on-street), and equestrians may use the walkway, it is designed primarily for pedestrians. Walkways are not required to be as wide as formal multi-use trails, nor are they required to

have as much separation from the roadway. The design parameters for the Branscomb Walkway are described below:

- The walkway will provide a continuous connection between the Cahto Reservation and Route 101.
- It will largely follow the same alignment as the informal footpath, but will deviate in one key locations (adjacent to the Laytonville Cemetery) to eliminate two crossings of Branscomb Road.
- Wherever possible, the walkway will be separated from the roadway to enhance pedestrian comfort.
- The walkway will be accessible to persons with disabilities, meaning that it will be at least 4 feet wide with a desired width of 5 to 6 feet.
- Sustained grades should not exceed five percent. Where grades exceed five percent, they may increase to up to 12 percent, but platforms (5-foot wide, by 5 feet in length) will be provided for every 30 inches of rise.
- The walkway surface will be crushed rock (compacted to ADA-required surface tolerances) for consistency with the community

character and consistent with most driveways along Branscomb Road.

These design parameters are driven by community desires as well as the Americans with Disabilities Act (ADA) Access Guidelines, which requires that any newly constructed pedestrian facility be accessible to disabled pedestrians.

Branscomb Road Walkway Segments Key Map



Segment Priorities

Laytonville High School has received a \$500,000 Safe Routes to School Grant that will be used to construct the Branscomb Road walkway. This is a sufficient amount of money to construct many, but not all, of the desired improvements. As a result, the community has established the following priorities.

Construct as much of the facility as possible, focusing on (in priority order):

1. The segment from Reservation Road to Ten Mile Creek
2. The segment from Ten Mile Creek to the High School
3. The segment from the High School to Route 101
4. Replace the narrow wooden walkway on the Ten Mile Bridge

The segment of the walkway adjacent to the High School is already fully improved with attached 8-foot sidewalks.

Segment Descriptions

Reservation Road to Ten Mile Creek – This segment is broken into seven reaches for ease of description.

These reaches start at Reservation Road and work north to Ten Mile Creek. Segments are identified in the attached figure.

Segment #1 - The southern-most portion of the walkway would be constructed on the south/east side of Branscomb Road on the existing unpaved shoulder. As shown in the photo on the left (below) there is an existing crosswalk at this location that should be removed.



Segment #1 - Branscomb Road at Reservation Road looking northeast. The walkway would enhance the shoulder and eliminate the crosswalk.



Segment #1 - Branscomb Road looking southwest toward Reservation Road. The walkway would formalize this footpath.

Segment #2 – Under current conditions, the walkway in Segment #2 is located on the northwest side of Branscomb Road. To accomplish this, there are two crosswalks, at the end of Segment #1 and the start of Segment #3. Both of these crosswalks are located in areas with limited corner sight distance. The project would continue the walkway on the southeast side of Branscomb Road, traveling through a stand of trees, some of which would be removed. This will likely require acquisition of some right-of-way, but will permit elimination of two street crossings.



Segment #2 - Branscomb Road looking southwest. The informal walkway is on the northwest side of the street, but will be moved to the opposite side behind the line of trees.



Segment #1 – This photo is taken on the southeast side of Branscomb looking northeast. Although the informal path is well-worn, improving it to a formal walkway may require creative solutions, such as splitting the walkway into two 36-inch walkways around this utility pole.



Segment #2 - Branscomb Road looking southwest. The informal walkway is on the northwest side of the street, but will be moved to the opposite side.

Segment #3 – This segment extends from Laytonville Cemetery to the crosswalk south of Bauer Road. Within this segment, the walkway is on the east side of Branscomb Road separated from the roadway by a natural drainage swale. It crosses Milligan Lane and two private driveways. Each of these is an unfinished crushed rock surface, consistent with the proposed for the walkway surface. Accomplishing grade requirements at the driveways will be somewhat challenging as there are short, steep grades from the walkway above to the driveways below. In addition, there are two segments where the walkway is higher than the road with steep grades and winds between closely-spaced trees.



Segment #2 - Branscomb Road looking west at and beyond the Laytonville Cemetery driveway. The current walkway transitions from the south to the north side of the street, but with proposed improvements would continue on the south side behind and among the trees on the left-hand side of this photo.



Segment #3 – There are two driveways where resolving walkway (running left-to-right across the driveway) slopes approaching the driveway will require re-grading of the walkway approaches to the driveways.



Segment #3 – This photo is taken looking south on the east side of Branscomb Road. In this segment there are a few short portions where removal of trees and/or relocation of fences will be required.

Segment #4 – Segment #4 extends from the crosswalk on the north end of Segment #3 to Ten Mile Creek. In this segment, the walkway transitions to the west side of Branscomb Road, around the outside edge of the curve near Bauer Road and continues along the north side of Branscomb Road to the Bridge. The walkway would be separated from the roadway in the southern portion of the segment (approaching the crosswalk) and immediately adjacent to the road for the remainder. There is sufficient width throughout this segment to accommodate the walkway

without major modifications. In combination with the addition of the walkway, re-grading of the Branscomb Road edge of roadway may be desirable around the corner near Bauer Road. In this area, Branscomb Road has negative super-elevation, meaning that the grade of the road tends to make it more difficult for vehicles to remain on the roadway if they inadvertently off-track around the high-speed corner. If the shoulder is improved as a formal walkway, and should resources permit, the shoulder should be regarded to provide positive super-elevation on the outside edge of the curve.



Segment #3 – This photo is taken looking south on the east side of Branscomb Road. In this segment there are a few short portions where removal of trees and/or relocation of fences will be required.



Segment #3 – This photo is taken looking north on the east side of Branscomb Road toward the crosswalk that forms the northern limit of this reach. In several places, the walkway will be above roadway and separated by a natural drainage swale. One reason for selecting a crushed rock trail surface is to simplify maintenance in the event that the slope sloughs off.



Segment #4 – This photo is taken looking south on the west side of Branscomb Road toward the crosswalk that forms the southern limit of this reach. While there are obstacles, including fences and trees, there is sufficient space to add a four to six-foot walkway.



Segment #4 – This photo is taken looking south on the west side of Branscomb Road (the curve after Bauer Road is behind).



Segment #4 – This photo is taken looking north on the west side of Branscomb Road at the curve after Bauer Road is behind. The trail would be located in the shoulder area. It would be desirable to re-grade the outside edge of the curve to add super-elevation.



Segment #4 – This photo is taken looking west on the north side of Branscomb Road at the Bauer Road intersection and curve. The trail would be located in the shoulder area. It would be desirable to re-grade the outside edge of the curve to add super-elevation.

Segment #5 – Ten Mile Creek Bridge has a narrow wooden-surface walkway on the north side. The walkway consists of three 2” by 12” boards laid over supports spaced at 3-foot intervals. It is not of sufficient strength to meet weight requirements for a walkway as demonstrated by equestrians, who cross the bridge in the roadway. The Bridge is flooded in high rainfall years, but constructed of reinforced concrete designed to withstand floods. Rather than modify this bridge, the desired improvement would be a new free-standing pedestrian bridge on the north side of the existing bridge. There are a number of potential structure types, but some type of prefabricated lift-into-place structure is likely to be most cost effective. Local tradition is to use train flatbed freight cars. To support a prefabricated bridge span, foundations would be poured on both ends of the span. It may be desirable to raise the level of the bridge such that it clears the 100-year flood high water mark, which would require short ramps on both ends.



Segment #5 – The photos above and below are taken looking east on the north side of Branscomb Road at the narrow pedestrian walkway spanning Ten Mile Creek. The walkway is rustic and narrow.



Segment #5 – This photo is taken looking west on the north side of Branscomb Road with the Ten Mile Creek walkway just beyond the pedestrians. There is little separation between the walkway and high speed vehicles.



Segment #5 – This is a photo of the underside of the Ten Mile Creek Bridge. The existing walkway is an extension to the current bridge and is not of sufficient design to support equestrians.



Segments #6 and 7– These segments extend from Ten Mile Creek to Route 101 with Laytonville High School located at the mid-point. In this portion, the walkway would be located on the north side of Branscomb Road. There is a formal sidewalk (with curb, gutter and drainage) adjacent to the High School, and while continuing a formal sidewalk may be desirable connecting the High School to Route 101 (Segment #7), Segment #6 would continue the crush rock walkway within the shoulder area of the roadway. It may be desirable to widen the Segment #6 walkway to 8 feet to match the width of the High School’s sidewalk and accommodate higher pedestrian demand in this area.



Segment #6 – This photo is taken looking west on the north side of Branscomb Road with the Ten Mile Creek walkway in the distance. There is sufficient shoulder width to accommodate a walkway located adjacent to the roadway.

Caltrans Design Modifications



June 22, 2007

Phil Dow
Executive Director
Mendocino Council of Governments
367 N. State Street, Suite 206
Ukiah, CA 95482

Re: *Laytonville Traffic Calming and Downtown Revitalization Project – Requested Caltrans Design Modifications*

Dear Phil:

This letter is a follow-up to the Laytonville Traffic Calming and Downtown Revitalization Charrette that took place in Laytonville from May 19-24. As you know, Laytonville community members voiced strong support for reducing traffic speeds and improving bicycle and pedestrian circulation during the Charrette.

Fehr & Peers and the Project Team met with Caltrans on May 21, in part to discuss the Highway 101 Improvement Project (Contract No. 01-429304) currently under design. The preliminary design plans for this project contain several important bicycle and pedestrian features, including sidewalks with pedestrian-scale lighting, street trees, multiple crosswalk locations, 11-foot travel lane widths, and a 1.5 meter (5-foot) shoulder.

As part of our meeting, several additional items relating to Caltrans' current design were discussed. Specifically, the Project Team suggested several modifications to the design to further enhance bicycle and pedestrian conditions and reinforce the identity of Downtown Laytonville. They were:

- Use of colored shoulder treatments on US-101 in Downtown Laytonville
- Modifications to the corner curb radius or addition of a pedestrian refuge island at the west leg of the Branscomb Road / US-101 intersection

As agreed to at the meeting, Fehr & Peers has investigated the use of colored bicycle lane treatments in California and elsewhere and summarized this information below. We have also included additional description of the proposed modifications to the west leg of the Branscomb Road / US-101 intersection.



*Colored shoulders on a State Highway in Florida
(source: pedbikeimages.org / Dan Burden)*

Colored Shoulder Treatments

Fehr & Peers conducted research on colored shoulders and bicycle lanes as a potential traffic calming and bicyclist safety tool. Colored (or pigmented) shoulders have been used as a traffic calming and bicyclist safety tool for decades in Europe but have also been implemented in cities in the United States.

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Colored shoulders have been installed in Chino Hills, California and along state-highway facilities in Florida. Colored bicycle lanes in high-risk areas have been installed in Petaluma and Sunnyvale in California as well as in Portland, New York, Chicago, and several other U.S. cities.

Past studies indicate the key advantages to colorization treatments:

- Narrows feel of the street and may help reduce traffic speeds
- Improvement in bicycle safety at high conflict areas - treatment has been shown to significantly improve safety in Europe and North America
- Reduction in motorists encroaching on shoulders or bicycle lanes
- Improvement in visibility and warning bicyclists and motorists of high-conflict areas

Studies on effectiveness indicate that vehicles are more likely to stay out of colored shoulder areas than unmarked or lined shoulders, decreasing the likelihood of bicycle-automobile conflicts. Studies have also shown that more motorists will yield to cyclists when colored shoulders are present.¹

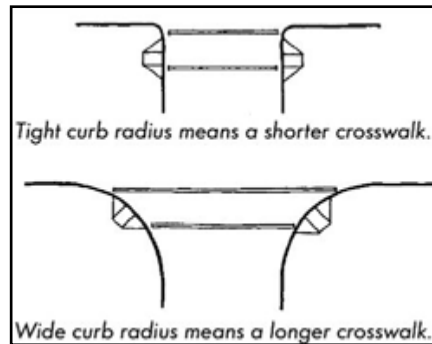
Table 1 in Appendix A describes three treatment types that are generally appropriate for colored shoulders: tennis paint, dyed asphalt, and thermoplastic coating.

Fehr & Peers recommends that dyed asphalt be used for traffic shoulders due to its ease of implementation (when completed with roadway resurfacing), high durability, and low maintenance requirements. While tennis paint is not highly durable, it could be implemented if Caltrans desires to conduct a pilot study on the effectiveness of colored shoulders prior to permanent installation. Thermoplastic/epoxy coatings are more durable than tennis paint, but would have a higher installation cost due to the length of roadway where colored treatments would be used.

Caltrans' plans indicate the roadway will be resurfaced as part of the project. Using a colored asphalt dye for the roadway shoulders will add a negligible overall cost to the project if implemented as part of roadway resurfacing. Because dyed asphalt is highly durable and low-maintenance, there will be minor ongoing maintenance costs after installation.²

Modifications to the US-101 / Branscomb Road Intersection

The current Caltrans design plans for the US-101 / Branscomb Road intersection indicate a 15 -meter (approximately 50-foot) curb radius at the northwest and southwest quadrants to the intersection to accommodate the high proportion of trucks turning on Branscomb Road. While an adequate curb radius is important in an area where there are high numbers of turning trucks, it can also have substantial negative consequences for pedestrian safety. A large curb radius allows motor vehicles to turn at



¹ See "An Evaluation of Red Shoulders as a Bicycle and Pedestrian Facility" and "Evaluation of Blue Bike-Lane Treatment in Portland, Oregon" (University of North Carolina, 1998 and 2000); and "Evaluation of the Blue Bike Lane Treatment used in Bicycle-Motor Vehicle Conflicts Areas in Portland, Oregon" (Federal Highway Administration, 2000)

² Ongoing maintenance costs would primarily be due to the need to match the color for pavement repairs.

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high speeds, and it significantly increases the pedestrian crossing distance at the west leg of the intersection (see example figure at right). This is particularly important in areas of relatively high pedestrian activity such as the Branscomb Road / US-101 intersection.

Because of the need to promote pedestrian safety at the US-101/Branscomb Road while still accommodating the high number of trucks that use Branscomb Road, two solutions are proposed. Fehr & Peers recommends Option 1 be implemented.

Option 1: Reduce the corner curb radii to 25-35 feet (25 feet preferred)

A corner curb radius will reduce pedestrian crossing distances yet still provide adequate turning space for most trucks. Many trucks using this intersection are able to successfully navigate the smaller intersection footprint that exists today without encroaching onto the opposing traffic lane. In fact, the small concrete barrier at the northwest corner of the intersection is roughly equivalent to where the edge of the curb would be located with a 25-foot corner radius. All trucks observed making a right turn from southbound US-101 to westbound Branscomb Road successfully maneuvered around this obstacle without encroaching into the opposing travel lane.

Because most trucks use this intersection without difficulty today, Fehr & Peers recommends as small a radius as possible be included as part of the intersection design (see figure at right). This option would have the added benefit of decreasing overall project cost by lessening right-of-way that needs to be acquired in the vicinity of the intersection.



Option 1: Reduced Corner Radii

Option 2: Add a pedestrian refuge at the west leg of the intersection

If Caltrans maintains that a 15-meter radius is absolutely necessary at this intersection, we recommend Option 2 be included in the design instead. This would provide pedestrians a refuge or waiting area when crossing the west crosswalk and would maintain additional space for large trucks maneuvering through the intersection.

A pedestrian refuge island should be 5-6 feet in width and should have an end “cap” at the intersection for additional pedestrian protection (see figure at right).



Option 2: Refuge Island

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Conclusion

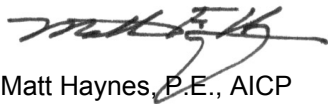
The preliminary Caltrans design plans for the Laytonville project contain several good bicycle and pedestrian features, including sidewalks with pedestrian-friendly amenities and bicycling accommodations. While these features are beneficial for bicyclist and pedestrian access and circulation, Fehr & Peers recommends the following modifications also be incorporated into the current design to further improve walking and bicycling conditions and reinforce the identity of Downtown Laytonville:

- Add colored shoulder treatment to US-101 within the project limits (Ramsey Road to 0.3 km north of Branscomb Road). Due to its durability and low cost, the recommended colored shoulder treatment is a dyed asphalt application.
- Modify the US-101 / Branscomb Road intersection to better accommodate pedestrian crossings by reducing corner curb radii as small as possible (25-feet, or 8-meters, is preferred) or installing a 6-foot wide pedestrian refuge island in the middle of the west crosswalk.

Please do not hesitate to call should you have any questions.

Sincerely,

FEHR & PEERS



Matt Haynes, P.E., AICP
Senior Transportation Engineer

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SF07-0324

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APPENDIX A

TYPES OF COLORED SHOULDER TREATMENTS			
Treatment Type	Tennis Paint	Dyed Asphalt	Thermoplastic/Epoxy Coating
Description of application	Tennis paint painted on top of existing asphalt to produce a colored shoulder.	Dye mixed in with asphalt and applied as shoulder. Requires repaving of existing shoulder.	Thermoplastic or epoxy coating bonded to new or existing asphalt.
Cost	Low - 5-10 cents/linear foot	Low - Costs are low if treatment is installed in conjunction with road repaving (higher if implemented as stand alone project)	Moderate - Approximately \$2.66/square foot
Durability	Low - Portland study found that in some areas paint wore off in 2-3 months - Other studies predict lifespan to be under 1 year	High - Lasts as long as streets but dye may begin to wear	Moderate to high - Short-term evaluations indicate that this application has good longevity, but there have been no long-term studies to date - As a lane marking, has an expected life-span of 2-4 years

Maintenance	High - Treatment needs to be reapplied every few months	Low - Dye may wear off, but should last the duration of any road	Low to Medium - Should last long, however the Portland (Hunter) study stated that one of the 8 lanes was in "fair" condition after a year. If applied incorrectly, may require some maintenance.
Potential Vendors	- Tennis Universal (http://www.tennisuniversal.com/) - Accurate Tennis - Most tennis-related vendors	- Asphaltcolor Architectural Asphalt (800-258-7679) - Most asphalt vendors	- Flint Trading (Premark®) (336-475-6600) - Ride-A-Way (http://www.streetprint.com/ride-a-way/) - Valley Slurry Seal Co. (Macro®-Color™ Colored Slurry Surfacing) (http://www.slurry.com/cont_Macrocolor.shtml)
Places of Application	Germany, Lake County (FL), Portland (OR)	Netherlands, Denmark, Lake County (FL)	Switzerland, Germany, Portland (OR), Chino Hills (CA), Petaluma (CA), Sunnyvale (CA)
Advantages	- Inexpensive. - Good to use for a pilot project to test the effectiveness of colored bike lanes in an area.	- Durable and effective. - Good to use when undergoing capital improvement project that already involves road repaving.	- Skid resistant. - Very vibrant. - Does not require any change to the actual road pavement.
Disadvantages	- Not a good long-term treatment. - Paint wears off quickly.	- Colors are not very vibrant so contrast is less noticeable and dark at night. - Can be expensive and labor-intensive if not applied with road repaving.	- Limited evaluations on long-term durability.
Research Studies	<ul style="list-style-type: none"> - "An Evaluation of Red Shoulders as a Bicycle and Pedestrian Facility" (Hunter) - "Evaluation of Blue Bike-Lane Treatment in Portland, Oregon" (Hunter) - Evaluation of the Blue Bike Lane Treatment used in Bicycle-Motor Vehicle Conflicts Areas in Portland, Oregon (Federal Highway Administration, 2000) - <i>Pavement Marking Summary</i> (Madison/Dane Counties, Wisconsin) - <i>Innovative Bicycle Treatments</i> (Nabti, Ridgway) 		
Source: <i>Fehr & Peers, 2007</i>			



Trail Accessibility Guidelines



ACCESSIBLE TRAIL FACILITIES

Trail Accessibility Guidelines

The American's with Disabilities Act (ADA) of 1990 requires that new and/or altered recreation facilities (including trails) be made accessible to and usable by people with disabilities. These facilities must comply with the ADA Accessibility Guidelines (ADAAG). However, some recreation/trail facilities have unique features for which additional provisions and special application sections are needed. For this reason, the US Access Board developed a report in 1999 outlining accessibility guidelines for newly constructed and altered outdoor developed areas covered by the ADA.¹

The Access Board's 1999 guidelines propose to create a new chapter (Section 16) in ADAAG. All newly designed and constructed trails, and altered portions of existing trails connected to an accessible trail or accessible trail head must comply with Section 16. Designers and operators are permitted to depart from the technical provisions of section 16 where specified and where at least one or more of four specific conditions are present. The technical provisions for accessible trails are contained in Section 16.2.1 through 16.2.10:



Unpaved Crushed Stone Trail in
Yellowstone National Park

Source: Access Today

16.2.1 Surface. The trail surface shall be firm and stable.

16.2.2 Clear Tread Width. The clear tread width of the trail shall be 36 inches (915 mm) minimum.

16.2.3 Openings. Openings in trail surfaces shall be of a size that does not permit passage of a ½ inch (13 mm) diameter sphere. Elongated openings shall be placed so that the long dimension is perpendicular or diagonal to the dominant direction of travel.

16.2.4 Protruding Objects. Protruding objects on trails shall comply with ADAAG 4.4.1 and shall have 80 inches (2030 mm) minimum clear head room.

16.2.5 Tread Obstacles. Where tread obstacles exist, they shall not exceed 2 inches (50 mm) high maximum.

16.2.6 Passing Space. Where the clear tread width of the trail is less than 60 inches (1525 mm), passing spaces shall be provided at intervals of 1000 feet (300 m) maximum. Passing spaces shall be either a 60 inches (1525 mm) minimum by 60 inches (1525 mm) minimum space, or an intersection of two walking surfaces which provide a T-shaped space complying with ADAAG 4.2.3 provided that the arms and stem of the T-shaped space extend at least 48 inches (1220 mm) beyond the intersection.

16.2.7 Slopes. Slopes shall comply with 16.2.7.1 and 16.2.7.2.

16.2.8 Resting Intervals. Resting intervals shall be 60 inches (1525 mm) minimum in length, shall have a width at least as wide as the widest portion of the trail segment leading to the resting interval, and have a slope not exceeding 1:20 in any direction.

16.2.9 Edge Protection. Where edge protection is provided along a trail, the edge protection shall have a height of 3 inches (75 mm) minimum.

16.2.10 Signs. Newly constructed and altered trails and trail segments complying with 16.2 shall be designated with a symbol* at the trail head and all designated access points. Signs identifying accessible trail segments shall include the total distance of the accessible segment and the location of the first point of departure from the technical provisions.

As described in Section 16.2.1, two primary measurements of trail accessibility are firmness (i.e., does a surface give way under foot?) and stability (i.e., does a surface shift from side-to-side or when turning?). Firmness and stability are measured using a penetrometer, which measures

¹ The final report may be found on the U.S. Access Board's website at <http://www.access-board.gov/outdoor/outdoor-rec-rpt.htm>

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firmness using penetration depth and stability using the rotation of the device. There are guidelines in place regarding trail accessibility, described as follows:

ANSI/RESNA Standards for Firmness & Stability			
	Very Firm/Stable	Moderately Firm/Stable	Not Firm/Stable
Firmness	0.3 inch or less	>0.3 & <0.5 inch	>0.5 inch
Stability	0.5 inch or less	>0.5 & <1.0 inch	>1.0 inch
ADA Accessible?	Yes	Yes, on trails ½ mile or shorter	No

Source: United States Access Board, "Access Today." Fall 2001.

An accessible trail must have room for passing every 1000 feet, a 1:20 (5%) cross-slope maximum, and surface openings that do not permit passage of a ½ inch diameter sphere. Thus, non-compacted surfaces such as gravel are generally not accessible. Also, shared-use paths that also allow bicycles and equestrians should be designed in accordance with AASHTO guidelines.

Accessible Crushed Stone Trails

Crushed stone trails are made out of a composite of crushed stones (generally granite) and a binder, which makes it more firm and stable than gravel. There are guidelines as to the maximum allowable diameter of the stones (3/8" or less) and a sieve test can be conducted to ensure that the stones are of a usable size to meet accessibility guidelines. The smoothness of the trail depends on how finely the stone is crushed. There are two types of binders used in crushed stone trails: organic binders, which are derived from the cactus plant, and stone dust, a natural binder that comes from the dust – a by-product of the crushing product. During the installation process, crushed stone is typically laid on a geotextile to improve the lateral stability and to prevent the stone from sinking into the soil (image 2). Usually, the foundation is slightly excavated, so that the trail will be flush with the existing ground. Then, power rollers and/or vibratory compactors roll over the trail in order to compact the trail (image 3). This is necessary for the trail to be firm and stable.

The National Center on Accessibility initiated a multi-year National Trails Surface Study in 2006 to study other suitable materials for accessible trail facilities.

Photos (L to R): Finished crushed stone path in Lake Oswego, OR, laying out the stone, compaction)



References:

1. "Trail Surfaces: What do I need to Know Now?" *Access Today*. Fall 2001. www.ncaonline.org/monographs/Trail_Surface.pdf
2. "What is an Accessible Trail?" *Access Today*. Fall 2002. www.ncaonline.org/monographs/Accessible-Trails.pdf
3. "Outdoor Recreation Appendix." United States Access Board. <http://www.access-board.gov/outdoor/outdoor-rec-app.htm>
4. "East Bay Regional Parks District Master Plan" (Chapter 3, Accessibility)
5. Boone, Tony. "Trail Design and Construction: The Art of Building Crushed Stone Trails." <http://www.americantrails.org/resources/trailbuilding/ArtCrushedStone.html>

