

parking lot and down the Cardiff House driveway. Rather than going all the way down to High, students can walk their bikes through the opening in the fence between UCSC and the Westlake playing field.

The return path is essentially the same route.

West of Bay

For most of the neighborhood west of Bay, the best route is to go to Nobel Drive, and cross Bay Drive there, then follow Iowa Drive to Cardiff and Cardiff to High. This route is not quite reversible. Rather than taking High west and attempting to make an unprotected left onto Cardiff, cross Moore with the crossing guard as a pedestrian, then ride Moore to Fridley, Fridley to Iowa, and cross Bay to Nobel at the light. The signal at Nobel/Iowa and Bay may need retiming to provide sufficient green time for cyclists crossing Bay.

The very steep hills on Arroyo Seco, Miramar, or Bayona probably need to be walked. For students living below most of the steep slope, it may be better to take Escalona east to Olive, turn right on Olive, and left on King. Bay Street can be crossed at King, and students can ride up Bay to Iowa. Returning from the school, the students can ride down Bay to make a right turn on Escalona.

Western Drive

For students on Western Drive, Meder Street, or the small area west of Western Drive, the best route to school may be to ride up to High Street and turn right on High. Students living near Meder and Bay should not try to cross Bay Drive at Meder, but should walk their bikes up the sidewalk one block and cross at High.

The return trip is more difficult, as the left turn off of High may be too difficult at the uncontrolled intersections above High. Students should cross Bay and High as pedestrians, then ride down Bay to Meder and turn right on Meder.

Bicycling Safely to Westlake Elementary School 1000 High Street Santa Cruz, California

Notes by Kevin Karplus

Effective Cycling Instructor



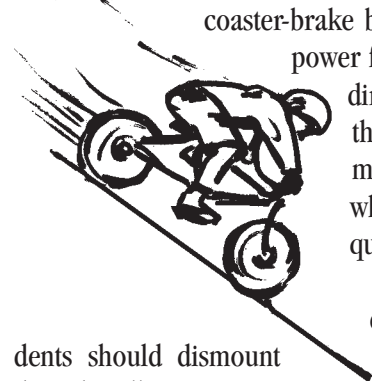
This pamphlet (available on the web as <http://www.soe.ucsc.edu/~karplus/bike/westlake-safe-bike.html>) contains notes on safe routes for elementary school children to bicycle to Westlake School. These notes are thoughts from the Safe Routes to School Committee at Westlake Elementary School (Santa Cruz, CA) about the problems for children bicycling to school and how to address them.

A more general discussion of the problem of finding safe routes to bike to school can be found in Guidelines for Choosing a Safe Bicycle Route To School (<http://www.soe.ucsc.edu/~karplus/bike/safe-route-to-school.html>).

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District is hilly.

The Westlake School district is quite hilly, extending from almost sea-level to about 800 foot elevation. Because of the marine terraces, there are some very steep slopes that are almost unavoidable. Because the younger students lack the strength to pedal up very steep slopes and



coaster-brake bikes do not have adequate stopping power for steep downhill slopes, we have to direct students to walk their bikes on the steep slopes, in both directions. The map or route guide should indicate where the slope is steep enough to require most students to walk.

Students should dismount at the corner and walk their bikes up the sidewalk.

One of the steepest hills is the driveway up to the school itself. Students should dismount at the corner and walk their bikes up the sidewalk.

Even some of the gentler hills are long enough for students coasting down the hill to end up going faster than they can safely control their bikes. Students have to be taught how to brake on long descents before trying these routes. No riding on sidewalks.

Contrary to most people's intuition, riding on sidewalks is far more dangerous than riding with traffic on the street—particularly on streets that have wide curb lanes or bike lanes. Children are legally allowed to ride bikes on residential sidewalks in Santa Cruz, but they should do so only if they are riding at no more than a walking speed. For first graders, riding on a sidewalk at walking speed may be appropriate, but fifth graders would be safer learning to ride on the street, since few of them would be willing to ride as slowly as safety requires on a sidewalk.

Westlake neighborhood

Students living in the triangle formed by Laurent, High, and Bay should make their way to Moore Street and cross High at Moore with the crossing guard.

Above High

Students living above High should take Spring Street or Kalkar drive to High Street and cycle up High to Westlake. (Parents may want to check out the shortcut through the church parking lots—it saves a little distance and hill climbing, but the parental pickup traffic through the church lots can make them more hazardous than the street.) This route is difficult to reverse, since the left turns onto and off of High Street require more skill than most of the students have. Probably the most effective way for the students to ride home would be to cross High at Moore as a pedestrian, ride down the bike lane to Laurent, then cross High as a pedestrian again on the far side of Laurent Street. Students should **not** ride down the sidewalk on the north side of High, as this is the most dangerous sort of sidewalk riding (high speed on the wrong side of the street).

Faculty Housing

Students from faculty housing should probably walk down the stairs rather than attempt to ride to school. They can ride home up the Cardiff House driveway, but riding to school from the Cardiff House driveway would require walking their bikes along the sidewalk on High Street—almost as much walking as taking the stairs directly to the school.

Family Student Housing

Students from Family Student Housing should ride up Heller to Meyer Drive, then take the bike path across the Great Meadow to Coolidge. The best route from there crosses Coolidge, goes through the

Below Mission

For the students living on Mission, or just below Mission on Union Street, Chrystal Terrace, or Locust, the best route is to cross Mission as a pedestrian at Union, then cross King as a pedestrian, and then ride along King to Storey. From Storey, they have the two choices of the below-High east of Laurent neighborhood.

Beach Flats

One route from Beach Flats to Westlake School is to cross the Riverside Bridge, then take the river levee on the east side of the river under the Broadway Bridge, cross the river again on the Broadway Bridge, ride up Front to Cathcart, take Cathcart to Cedar, and head north on Cedar. After that, the Beach Flat route merges with the downtown route.

An alternate route that might work better for some students is to take Beach Street and East Cliff Drive to Bay Street, then cycle up Bay to High, turn right at Iowa Drive, turn left on Cardiff, turn right on High, and cross High with the crossing guard at Moore. To return, students have to make a left turn from High onto Bay, but this can be done safely in two steps as a pedestrian at the entrance to UCSC. Because there are very few turns on this route and the hills are fairly gentle, it is probably easier for students to manage than the more complicated route through downtown.

Below High, east of Laurent

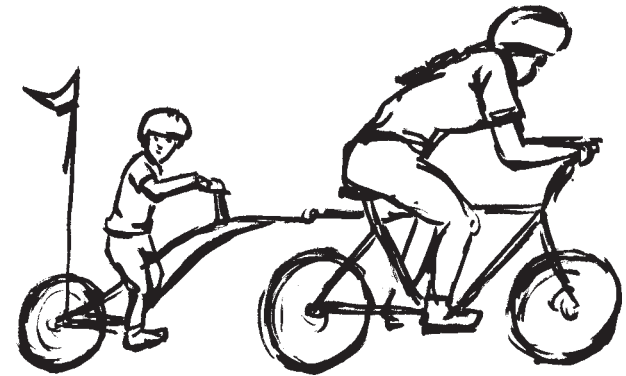
This neighborhood has two choices, similar to the choices for downtown: either they can go east on Escalona to Storey Street and up High, or west on Escalona to Laurent and walk up the Laurent Street hill.

Parents should probably ride both routes with their children to determine which works better for the skills of the individual student.

Parents' responsibility

Parents (or guardians or other trusted adults) should ride with the students the first several times they attempt to bicycle to school. The adults should be checking that the students have the strength, bike handling skills, traffic awareness, and knowledge of the route necessary to bike safely to school. Younger children may always need an older rider with them on some of the routes.

One solution for children who lack the strength to climb the hills is for an adult to add a "half-bicycle" trailer (such as the Trail-a-Bike sold by several local shops) to their own bikes. These allow the adult to provide most of the power. A bicycle trailer can also be used, but then the adult must provide all the power.



Since many families will not have an adult available to ride with children to and from school, it may be a good idea to set up "bicycle school bus" groups, so that one adult rides with several children from the same neighborhood. If there are two adults riding with the group, one should lead and the other should ride behind the last child. If there is only one adult with the group, a responsible child should lead and the adult should follow at the end.

Neighborhoods

The district can be divided into several different neighborhoods for determining the safe routes, with everyone in a given neighborhood following a similar route. The neighborhoods are (roughly) Beach Flats, downtown, Mission Hill, below High east of Laurent, Westlake, above High, Faculty Housing, Family Student Housing, west of Bay, and Western Drive.

Here are some key points for each neighborhood:

Downtown

From downtown there are two reasonable routes: One is to take Cedar or Center up to the intersection with Mission, cross Mission at the traffic light there, walk the bike up the sidewalk to Mission Plaza (stronger students could cycle up), cross the plaza and take the pedestrian bridge over Highway One to the end of High Street. Children can then cycle in the bike lane up High Street all the way to Westlake School.

Reversing this route to get home has several problems: Students coasting down High can end up going faster than they can control their bikes. One block of High (between Storey and Highland) is one way the wrong way. Although students could legally ride on the sidewalks for this block, doing so safely is difficult, unless the students walk their bikes for the block. Turning right on Storey, making a left turn on Escalona, then another left turn on Highland, then a right back onto High is often recommended for adults, but the two left turns across heavy traffic can be challenging for a child, so it would be safer to convert to a pedestrian and walk using the crosswalks and sidewalk for this block. Crossing Mission at Mission Plaza can be difficult for children (unless Holy Cross School has a crossing guard out). If there is no crossing guard, students should probably walk their bikes down the sidewalk to the traffic light at Center, and cross Mission there. The other route from downtown goes up Walnut Street (some students will have to walk this hill, though it is not as steep as Mission Street by

Mission Hill), crossing Mission at Walnut. Students then turn left at Escalona, and right at Laurent, walking their bikes up the steep hill on Laurent. Students then turn left on Moore, and continue straight to High Street, crossing High with the crossing guard at the entrance to Westlake School.

The Laurent Street hill is too steep for children to cycle down—stopping at the blind corner with the stop sign at the bottom of the hill requires better brakes than most children’s bikes have. Children should walk their bikes down this hill.

An alternative route up hill is to continue on Escalona to Bay Drive, and ride the bike lanes on Bay Drive up to Iowa Drive, turning right there and taking Iowa Drive one block to Cardiff. Turn left on Cardiff and right on High. When getting to Moore, dismount and cross High as a pedestrian with the crossing guard. (Students have to walk their bikes up the sidewalk to the school anyway, so dismounting is not an inconvenience.) The hill on Bay is less steep than Laurent, and only adds a small detour. A parent with a bicycle trailer or tandem-add-on would certainly be better off on Bay than Laurent. On the way down the hill, this route is not suitable for children, as the left turn off of Bay onto Escalona requires merging with high-speed traffic.

The Walnut Street route probably involves less traffic than the route over Mission Hill, but the Laurent Street hill is very steep and may be challenging for students even to walk their bikes up. The high school traffic on Walnut and the Westlake School traffic on Moore may be more difficult (and dangerous) for students than the UCSC commuter traffic on High.

Parents should probably ride both routes with their children, to determine which works better for the skills of the individual student.

Mission Hill

The Mission Hill neighborhood should take the first of the routes described for downtown, crossing the pedestrian bridge over Highway 1 at the end of High.