Slide
auto-drawing map geometry

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What is **Strava**

- Fitness tracking website
- “An online network for athletes”
- 120 million rides and runs
- 2 million new activities a week

1. Grab a GPS Device
2. Go Out for a Run or Ride
3. View Your Activities on Strava.com
How we are using OSM

- Route Builder ([http://www.strava.com/routes/new](http://www.strava.com/routes/new))
  - based on OSM
  - custom routing engine written in Scala
  - incorporates route popularity
- Maps from Mapbox
How we are using OSM

  - based on OSM
  - custom routing engine written in Scala
  - incorporates route popularity
- **Maps from Mapbox**
Helping to improve OSM

- **Geometry**
  - connections for routing
  - better representation of trails and rural roads
Reporting Tools

Select from [last 100] reports.

- The route won’t go to the road
- Can’t route on trail
- The map info is incorrect
- Other
- Fixed, Can’t Fix or What?

Total Reported: 3038   Fixed: 506

What’s this: Strava routing errors reported by users are displayed here for use by OSM map editors.
There's a trail here, but I can't route there
Created: 2014-02-26 02:14:05

The automatic mode sort of follows the fire road but it's off enough that any route built with this tool going on this fire road results in a bad experience with my garmin gps device. It just constantly beeps telling me I'm off course when I'm not. Only way around this I see is to use manual mode and like 1000 points to match the path. If I could create a route from my actual ride or somehow use the data I've uploaded to strava for a ton of rides it would be 100% accurate. Not sure why that data isn't somehow being used to create a more accurate route here.
Slide demo

http://labs.strava.com/slide/demo.html#17/-
122.54545/38.05432
Sliding the geometry into place

- Runs server side and is written in Go
- Leverages the Strava global GPS dataset
- Improves the path one step at a time
- Most slides complete in under 0.3 seconds

labs.strava.com
Based on Mathematical Optimization

3 components to the cost function

- Depth with respect to the surface
- Equal distance between resampled points
- Maximize vertex angles
Integration with the iD Editor

- Self hosted fork of iD
- Extra Slide operation/action
  - select 2 or more nodes on the same way, will slide section between them
  - select a way to slide the whole thing

strava.github.io/iD
Id demo

http://strava.github.io/iD/#background=Bing&map=17.34/-122.54499/38.05496
http://strava.github.io/iD/#background=Bing&map=16.90/-88.14613/42.31283
Thank you

labs.strava.com

- Global Heatmap
- Reported Routing Errors
- Slide Tool

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