

GitHub For Planners



GitHub



git

APA

Tech



American Planning Association
Making Great Communities Happen

What is the American Planning Association?

About the American Planning Association

- We are the oldest and largest community of domestic and international planners.
- We are an association, which means we exist to serve your needs—help you get hired, do better at your job, connect with others, and channel your voice into the planning conversation.
- We have 47 state or regional [chapters](#) and 21 interest- and population-specific [divisions](#). Many have student or young professional groups tailor-made for your involvement.

What is the APA Technology Division?



APA Technology Division consists of planners, technologists, and other APA Division members interested in how technology can assist in the planning design and decision-making process to create new opportunities to enhance public involvement, share information, and make more informed decisions in cities and towns throughout the country.

[Website](#)

[Facebook](#)

[LinkedIn](#)

Upcoming Events

- NPC 2021
 - Planning Technology & The Future of your Career (Post NPC Webinar)
 - Annual Technology Division Meeting
- APA Elections – Technology Division Positions
 - Secretary & Chair
- Future Webinars
 - Topics on concerning AI, Equity, Engagement, and their connections to technology
- Continued Engagement on GitHub
 - Contribute to our repositories or suggest a project

Introductions

Presenters



David Wasserman, AICP
Data Science Practice Leader



Marshall Ballard, GISP
Data Liberator



Introductions

Outline

- Why talk about this?
- What is GitHub & Git?
- How do you navigate a repository?
 - 4 Examples
- Dialogue Through Issues
- Cloning A Repository
 - What is Markdown?
- Pushing Changes to a Repo
 - When you own it
- Pull Requests & Changes to Other's Repositories
 - When someone else does
- Process Demonstration
 - Repositories Owned by You
 - Repositories Owned by Others



<https://github.com/varoudis/depthmapX>

Introductions

Why talk about this?

- If we hear:
 - “Code is the new concrete”
 - “Data is the new oil”
- It might be a good idea of what the mixer & refineries look like



Source: [SpaceNews](#)

Why use Git?

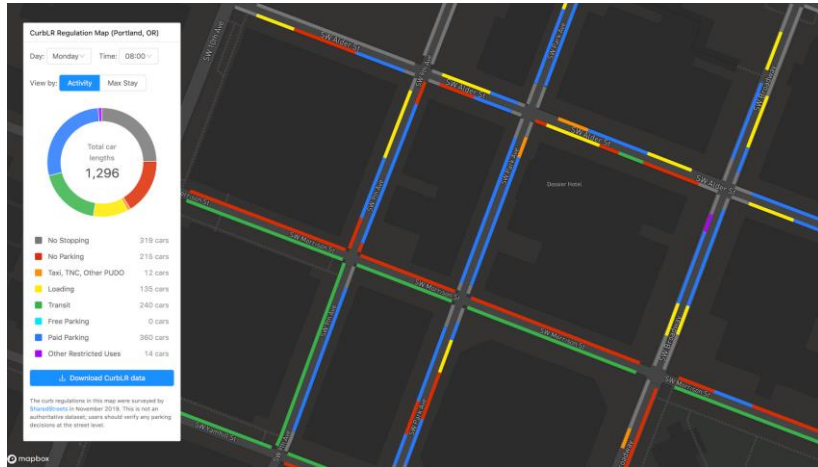
How can GitHub help planners & planning?

- There are lots of free tools & resources on the internet
- Provides a location for planners & technologists to collaborate
- You can create web hosted portfolios & basic web pages with GitHub
- Contemporary Transportation Technology uses Software
- Open Source Software enables bottom-up solutions to civic problems
- Cities are increasingly benefit from being digitally savvy to be in a post-pandemic world



Examples

Planning Repositories

[curbLR](#)

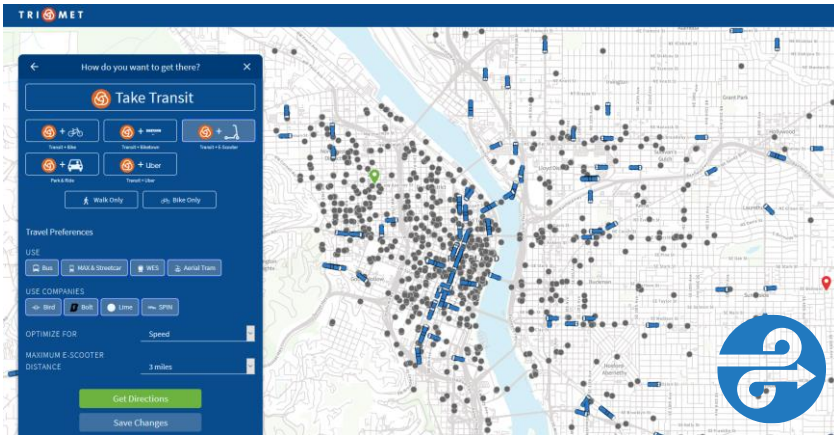
State	Number of Buildings	Unzipped MB
Alabama	2,460,404	526
Alaska	110,746	26

First Stage - Semantic Segmentation

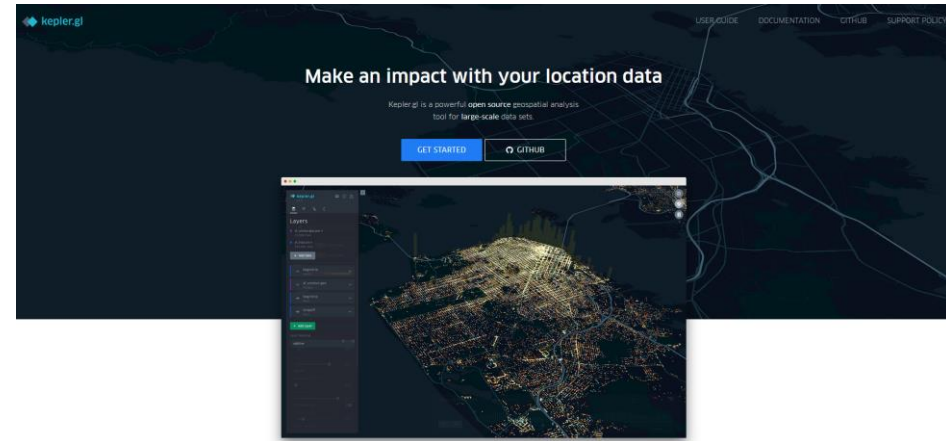
[USBuildingFootprints](#)

Examples

Planning Repositories



[Open Trip Planner](https://opentripplanner.org/)



[Kepler.gl](https://kepler.gl/)

[Urban Computing Landscape](https://planning.org/)

Examples

Planning Repositories



[StreetMix](#)



[Complete Street Rule](#)

What is it?

Planning Technology Resources

How do we build something together?

APA-Technology-Division / **planning-technology-resources**

Unwatch 4 Unstar 6 Fork 1

<> Code Issues Pull requests Discussions Actions Projects 1 Wiki Security Insights Settings

master 2 branches 0 tags Go to file Add file Code

File	Commit Message	Commit Date
d-wasserman Update PlanningDataSpecifications.md ...	8b79a39	2 days ago
resource_pages	Update PlanningDataSpecifications.md	2 days ago
CONTRIBUTING.md	Format Edits	28 days ago
LICENSE	Create LICENSE	6 months ago
README.md	Update README.md	2 days ago

70 commits

planning-technology-resources

This repository contains curated list of different planning data & technology resources. Those interested in the built environment are invited to review and contribute to this repository.

About

This repository contains curated list of different planning data & technology resources.

data technology resources urban-planning planners

Readme

Apache-2.0 License

Releases

No releases published
Create a new release

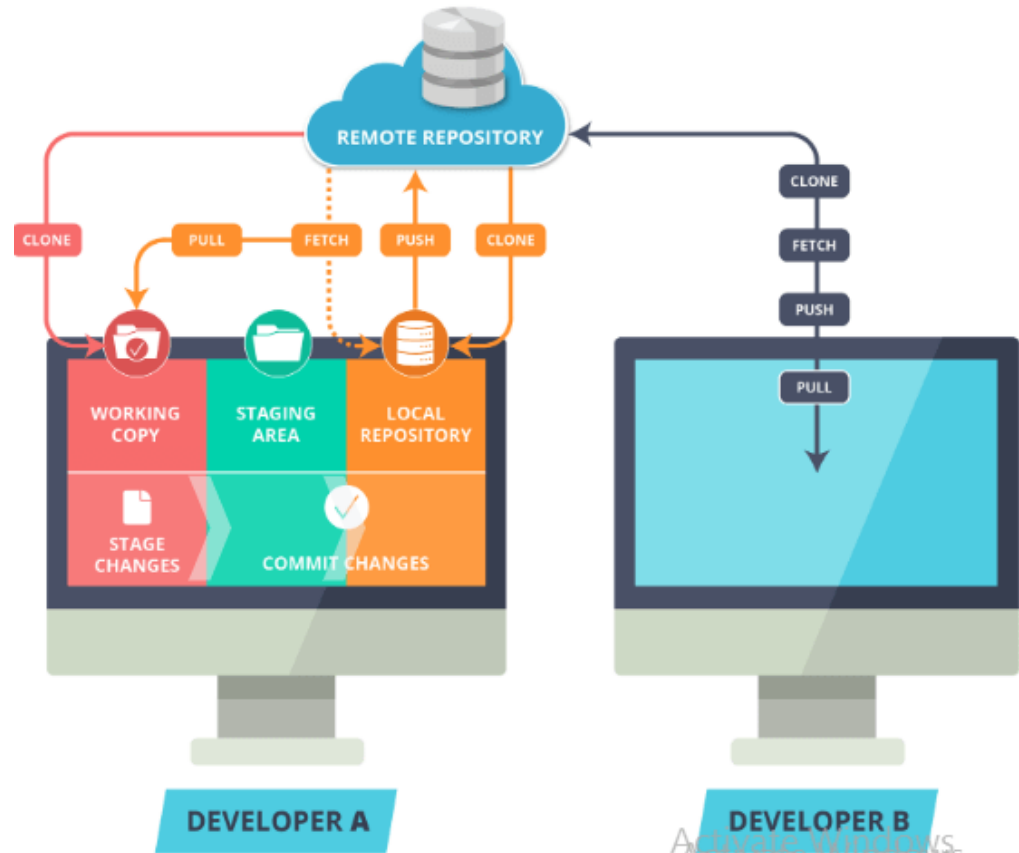
Packages

What is it?

What is Git?

Git - is software for tracking changes in any set of [files](#) typically as part of the software development process.

- Developed in 2005 by Linus Torvalds (Linux OS Creator)





What is it?

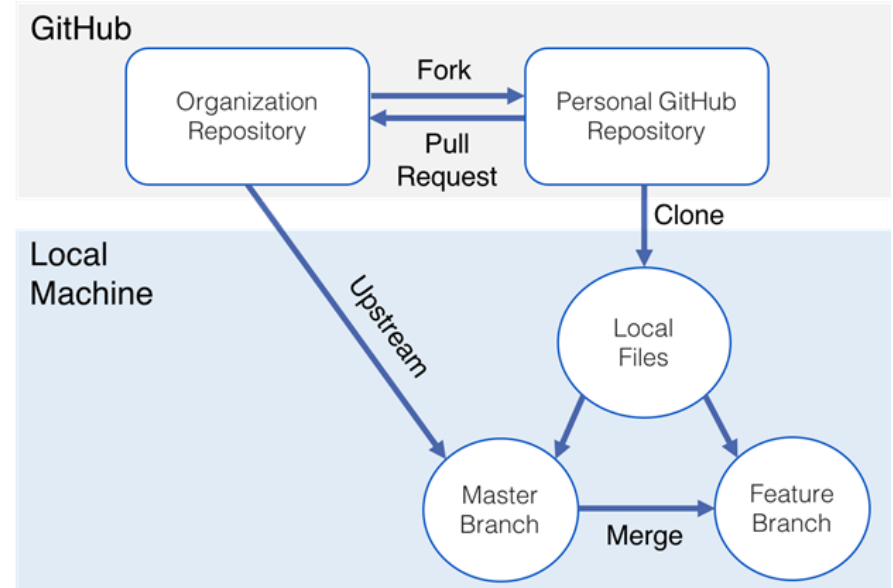
What is Git?

- Distributed Version Control System- like track changes in MS Word, but for multiple files & folders
- Primarily used by software developers
- A layer on top of a filesystem that tracks changes to files and retains historical changes.
- Allows for variations of projects to be created and maintained.
- Single source of truth or record of a project.
- What are GitLab, GitHub, Atlassian?

What is it?

What is GitHub?

- Microsoft subsidiary
- One of the largest development communities
- Cloud based Git resource



What is it?

Terminology

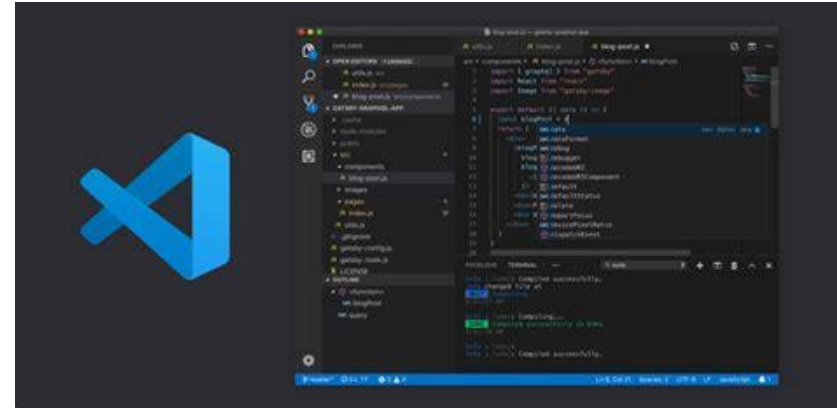
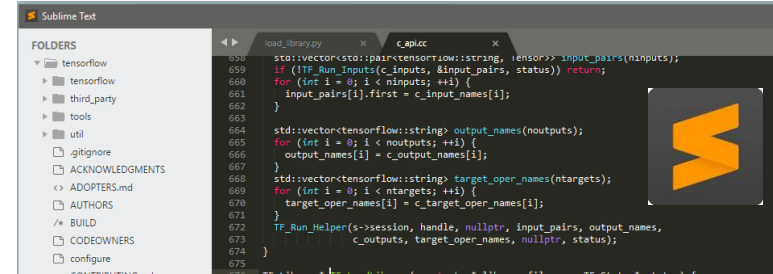
- **Clone** - A clone is a copy of a repository that lives on your computer instead of on a website's server somewhere, or the act of making that copy
- **Commit** - A commit, or "revision", is an individual change to a file (or set of files)
- **Fork** - A fork is a personal copy of another user's repository that lives on your account
- **Push** - To push means to send your committed changes to a remote repository
- **Pull** - Pull refers to when you are fetching in changes and merging them

Taken From: <https://docs.github.com/en/github/getting-started-with-github/github-glossary>

Examples

Tools to use

- GitHub Desktop
- Git Bash
- Visual Studio Code, Sublime, Notepad++

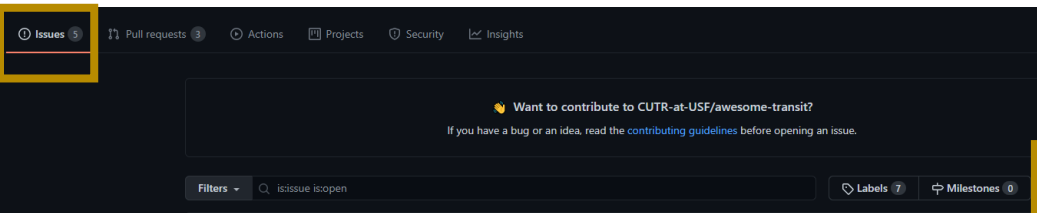


Issues

Talking to Issue Owners

- Filing an issue is a non-technical exercise that all planners can use to engage with technologists and exchange ideas
- Most repository owners respond favorably to well meaning questions & suggestions

Step 1: Go to Issues Tab



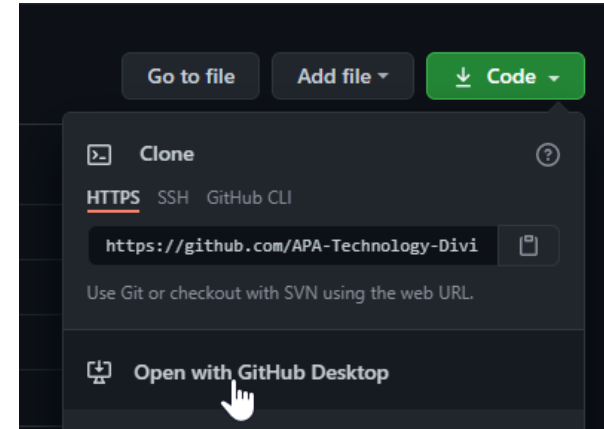
Step 2: Click New Issue

Working with Git

Clone A Repository

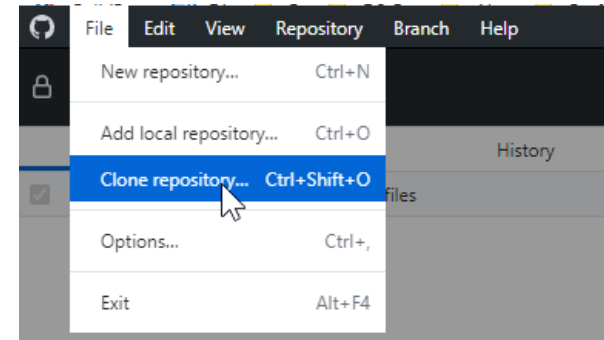
- Cloning a repository creates a local copy of files associated with a project on your drive.

Online



OR

GitHub Desktop



Documents > GitHub > planning-technology-resources >

Name	Date modified	Type	Size
resource_pages	3/8/2021 9:44 AM	File folder	
CONTRIBUTING.md	3/8/2021 9:44 AM	MD File	2 KB
LICENSE	3/8/2021 9:44 AM	File	8 KB
README.md	3/8/2021 9:44 AM	MD File	3 KB

Working with Git

What is Markdown?

Markdown – is a text based formatting language that can be used to format and layout webpages on GitHub and similar sites.

Basic Syntax

These are the elements outlined in John Gruber's original design document. All Markdown applications support these elements.

Element	Markdown Syntax
Heading	# H1 ## H2 ### H3
Bold	**bold text**
Italic	<i>*italicized text*</i>
Blockquote	> blockquote
Ordered List	1. First item 2. Second item 3. Third item
Unordered List	- First item - Second item - Third item
Code	`code`
Horizontal Rule	---
Link	[title](https://www.example.com)
Image	![alt text](image.jpg)

<https://www.markdownguide.org/cheat-sheet/>

Working with Git

Pushing Changes to a Repository you “Own”

JS/HTML/CSS

Front-end web related packages and resources

```
* **Resource Name**: Name of the resource
* Description: A description of what it provides to viewers in a sentence or two.
* License: The type of open source license applied to the resource if any. Non-opensource resources should be
* Provider: Who is the sponsor or provider of the resource.
* Links: Hyper-Link(s) to the resource.
```



JS/HTML/CSS

Front-end web related packages and resources

```
* **Turf.js**
* Description: Advanced geospatial analysis for browsers and Node.js.
* License: MIT License
* Provider: Turfjs
* Links: [About] (https://turfjs.org/) / [GitHub] (https://github.com/Turfjs/turf)
```



Working with Git

Pushing Changes to a Repository you “Own”

Current repository
planning-technology-resources

Current branch
master

Fetch origin
Last fetched 4 minutes ago

Changes 1

History

resource_pages\PlanningCodingResources.md

@@ -49,11 +49,11 @@ R Packages & Related Resources

JS/HTML/CSS

Front-end web related packages and resources

52

53

54

55

56

- * **Resource Name**: Name of the resource

- * Description: A description of what it provides to viewers in a sentence or two.

- * License: The type of open source license applied to the resource if any. Non-opensource resources should be labeled "Proprietary" or "Other".

- * Provider: Who is the sponsor or provider of the resource.

- * Links: Hyper-Link(s) to the resource.

+ * **Turf.js**

+ * Description: Advanced geospatial analysis for browsers and Node.js.

+ * License: MIT License

+ * Provider: Turfjs

+ * Links: [About](https://turfjs.org/) / [GitHub](https://github.com/Turfjs/turf)

57

58

59

Other

Add Turf as a JS resource

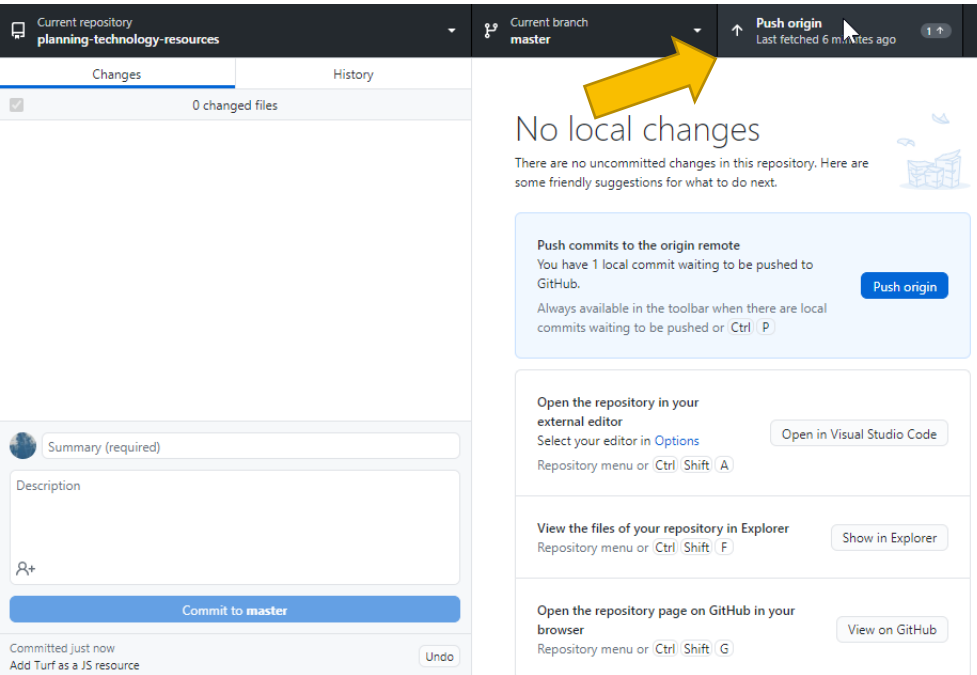
Add Turfjs as a resource for coding.

Commit to master

planning.org

Working with Git

Pushing Changes to a Repository you “Own”



Updated on Page



JS/HTML/CSS

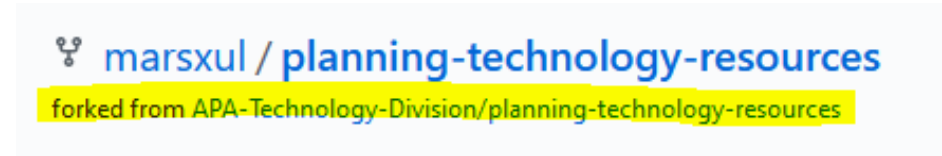
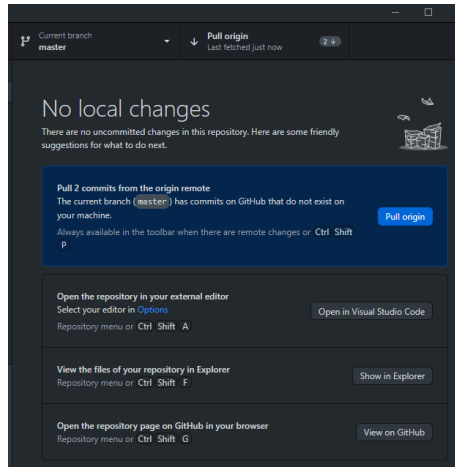
Front-end web related packages and resources

- **Turf.js**
 - Description: Advanced geospatial analysis for browsers and Node.js.
 - License: MIT License
 - Provider: Turfjs
 - Links: [About](#) / [GitHub](#)

Working with Git

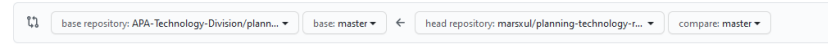
Pull Requests to Other People's Repositories

fork – By forking a repository you can edit, and eventually fill a pull request to merge into the original repo if desired.



Comparing changes

Choose two branches to see what's changed or to start a new pull request. If you need to, you can also [compare across forks](#).



There isn't anything to compare.

APA-Technology-Division:master and marsxul:master are identical.

Showing 0 changed files with 0 additions and 0 deletions.



No commit comments for this range

Working with Git

Pull Requests to Other People's Repositories

Comparing changes
Create Pull Request
Add notes

```

16 resource_pages/PlanningDataSpecific
@@ -23,7 +23,7 @@ A collection of urba
23 23 * Description: A data specifi
24 24 * License: CC4/Apache 2.0
25 25 * Geographic Coverage: Global
26 26 * Provider: Opensource Collabora
27 27 * Provider: Opensource Collabora
28 28 * Links : [shared-row](https://g
29 29
40 40 @@ -41,6 +41,13 @@ A collection of urba
41 41 * Provider: Open Mobility Founda
42 42 * Links : [OMP-MDS](https://gith
43 43
44 44 + **MTLFS**
45 45 + * Description: The Managed and Tr
46 46 + * License: MIT
47 47 + * Geographic Coverage: Global
48 48 + * Provider: Opensource Collabora
49 49 + * Links : [MTLFS](https://github
50 50
44 51 ## Built Environment
45 52
46 53 + **DTDL**
47 54
48 55 @@ -49,3 +56,10 @@ A collection of urban planning related data specifications and standards for use
49 56 * Geographic Coverage: Global
50 57 * Provider: Microsoft- Azure
51 58 * Links : [Azure-DTDL](https://github.com/Azure/pendigitaltwin-building)
52 59
53 60 + **BLDS**
54 61 + * Description: The BLDS data standard is a collaborative effort by civic technology companies, governments and other interested parties to create a
55 62 + * License: Unknown
56 63 + * Geographic Coverage: United States
57 64 + * Provider: Opensource Collaborators
58 65 + * Links : [BLDS](https://github.com/open-data-standards/permitdata.org/wiki/Core-Permits-Dataset-Requirements)

```

Comparing changes

Choose two branches to see what's changed or to start a new pull request. If you need to, you can also [compare across forks](#).

base repository: APA-Technology-Division/plann...
base: master
head repository: marsxul/planning-technology-r...
compare: master

✓ Able to merge. These branches can be automatically merged.

Discuss and review the changes in this comparison with others. [Learn about pull requests](#)

Create pull request

1 commit 1 file changed 0 comments 1 contributor

Commits on Mar 19, 2021

Update of data standards and specifications

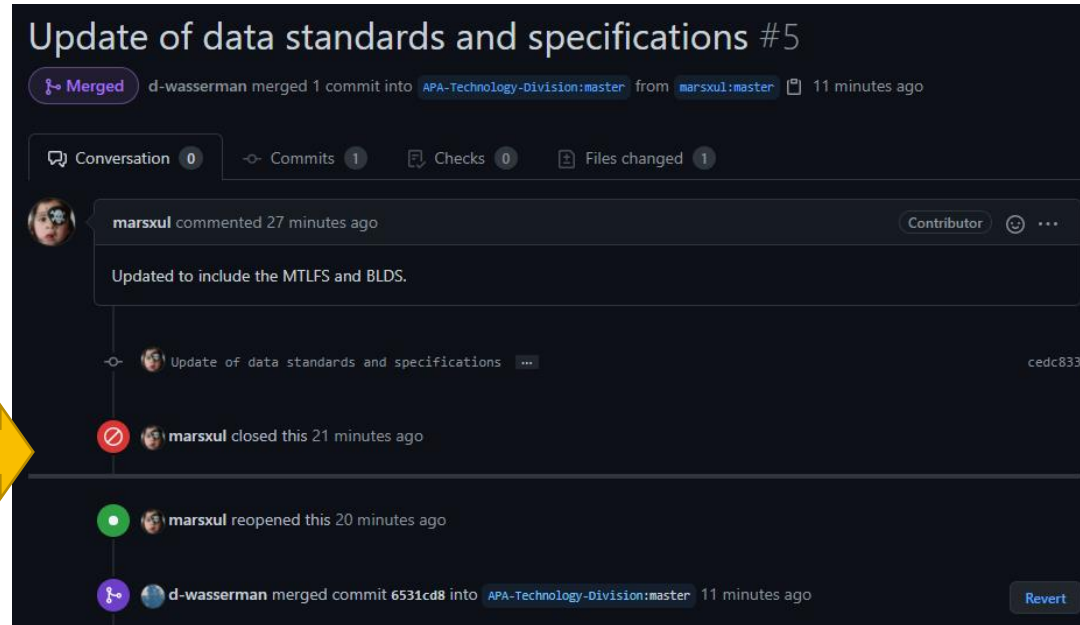
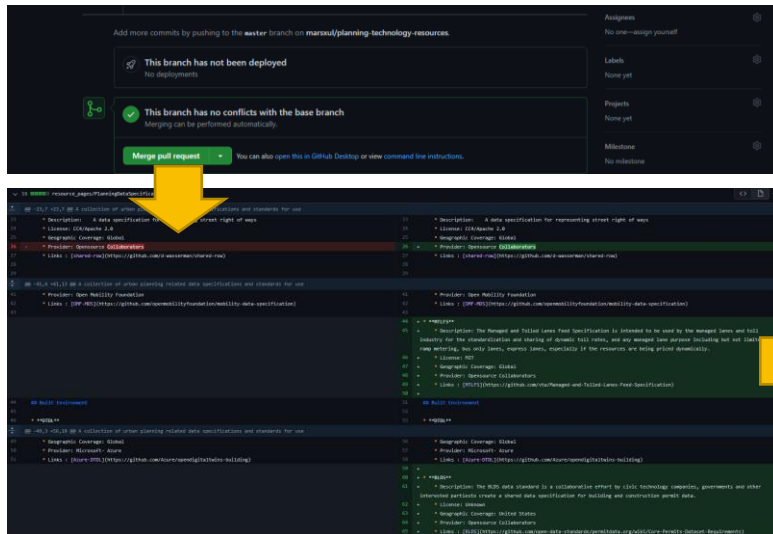
Showing 1 changed file with 15 additions and 1 deletion.

resource_pages/PlanningDataSpecifications.md
@@ -23,7 +23,7 @@ A collection of urban planning related data specifications and standards for use
23 23 * Description: A data specification for representing street right of ways
24 24 * License: CC4/Apache 2.0
25 25 * Geographic Coverage: Global

Working with Git

Merging Pull Requests from Others

- Review Request
- Merge it into master repo



Examples

A Different Way to Collaborate

Open Sustainable Technology

A curated list of open technology projects to sustain a stable climate, energy supply, and vital natural resources.

"True sustainability is open." - [prototypes](#)

Our ambition is to list all high quality and actively maintained projects worldwide. Your contribution is necessary to keep this list alive, increase the quality and to expand it. Read more about it's origin and how you can participate in the [contribution guide](#), [community chat](#), [presentation slides](#) and related [blog post](#). Please [contact us](#) to give feedback, hints and ideas for [OpenSustain.tech](#) or [create an issue](#).

 Community Chat



<https://github.com/protontypes/open-sustainable-technology>

Demonstration

Planning Technology Resources

- Safe practice area for anyone to contribute
- Help us build a useful resource, collectively constructed

APA-Technology-Division / **planning-technology-resources**

Unwatch 4 Unstar 6 Fork 1

<> Code Issues Pull requests Discussions Actions Projects 1 Wiki Security Insights Settings

master 2 branches 0 tags

Go to file Add file Code

d-wasserman	Update PlanningDataSpecifications.md	8b79a39 2 days ago	70 commits
resource_pages	Update PlanningDataSpecifications.md	2 days ago	
CONTRIBUTING.md	Format Edits	28 days ago	
LICENSE	Create LICENSE	6 months ago	
README.md	Update README.md	2 days ago	

README.md

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data technology resources urban-planning planners

Readme

Apache-2.0 License

Releases

No releases published
[Create a new release](#)

Packages

Q&A

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LinkedIn: <https://www.linkedin.com/in/david-j-wasserman/>

Marshall Ballard, GISP

m.ballard@fehrandpeers.com

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<https://tech.planning.org/>

apatechdivision@gmail.com



American Planning Association

Making Great Communities Happen