Network Wrangler 2.0

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Ohio Model User's Group March 19, 2021

Agenda

- 1. Big Idea (5 minutes)
- 2. Introduction to Project Cards (5 minutes)
- 3. Introduction to Project Card Registry (5 minutes)
- 4. Ohio Context (5 minutes)
- 5. Demonstration (10 minutes)
- 6. Q&A

1. Big Idea



Big Idea

Feature Set

- Open & Free
 - Thanks to Met Council (& MTC & SFCTA & WSP & UrbanLabs)
- Auditable Networks
- Shareable Networks
- Shareable Project Coding
- Code Once, Use Over and Over
- Draw Managed Lanes
- Python entry-point to Networks

2. Introduction to Project Cards

Example 1

Roadway Attribute

```
project: 6th St E Road Diet
category: Roadway Property Change
tags:
   - 'example'
dependencies:
  prerequisites: []
  corequisites: []
  conflicts: []
facility:
   link:
     - osm link id:
        - '223371529' # 6th St E
   A:
     osm node id: '187854529' # Jackson St
   B:
     osm node id: '187899923' # Robert St N
properties:
  - property: lanes
    existing: 3
    change: -1
notes: Simple project example
```

Example 2

Transit Edit

```
project: Blue Line Service Enhancement A
category: Transit Service Property Change
tags:
    - 'example'
dependencies:
    prerequisites: []
    corequisites: []
    conflicts: []
facility:
    trip_id: 14940701-JUN19-MVS-BUS-Weekday-01
    time: ['06:00:00', '09:00:00']
properties:
    - property: headway_secs
    set: 900
```

Example 3

Parallel Managed Lane

```
project: test managed lane project
category: Parallel Managed lanes
tags:
   - 'managed lanes'
dependencies:
  prerequisites: []
  conflicts: []
facility:
properties:
  - property: lanes
  - property: ML lanes
  - property: segment id
  - property: ML HOV
  - property: HOV
  - property: ML access
    set: 'all'
  - property: ML egress
    set: 'all'
notes: Placeholder for notes
```

Categories

Existing Functionality Supported by Network Wrangler 2.0

- Roadway Property Change
- Add Roadway
- Remove Roadway
- Transit Property Change
- Parallel Managed Lanes

3. Introduction to Project Card Registry

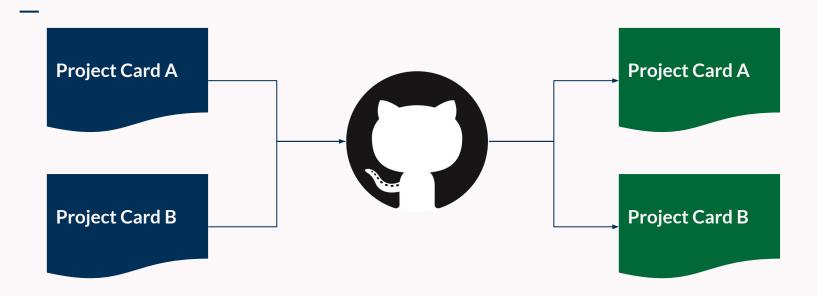
Project Card A:

Extend Main Street, adding new node #3456 at Location β .

Project Card B:

Extend Center Ave, adding new node #3456 at Location θ .

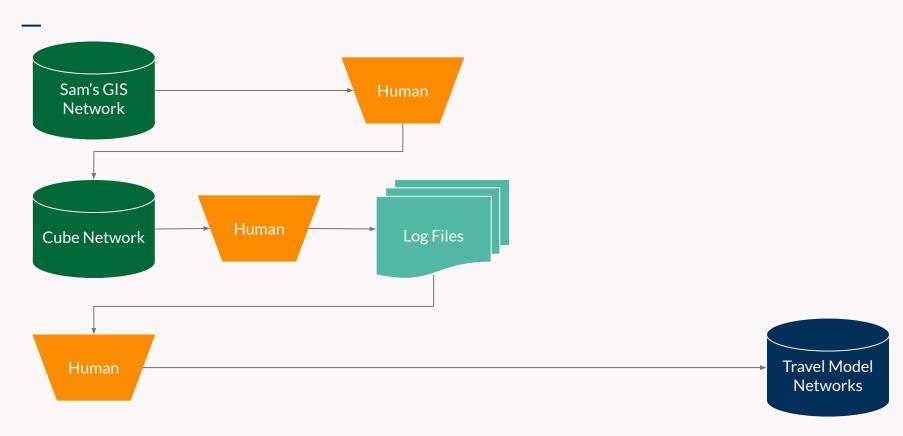
Project Card Registry



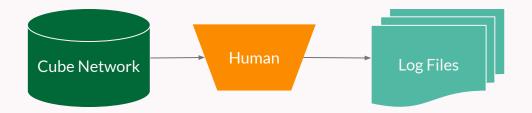
Node numbers are updated automatically to reconcile conflicts.

Project Card Registry

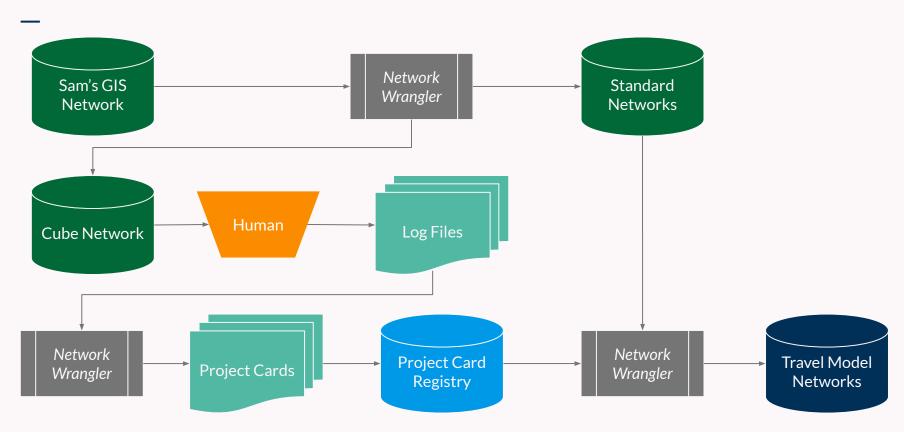
4. Ohio Context



Current Workflow



Workflow Carry-over



Proposed Workflow

5. Demonstration

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