



# Integrated Trip Planning

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MJC Transportation Innovations

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# Agenda

- Display trip plans - how does this work
- What data is needed for a trip plan output?
- Show successful integrated trip planning in other states for interregional trips
- View what happens for travelers with gaps in the network
- Other uses for standardized data output – Title VI
- “Who owns this data?”

# Sample Trip Plans

- [Victoria, BC to Forks, WA](#) (funded through 2008 Scenic Byways Grant for multi-modal trip planning)
- [Walla Walla to Taholah](#)
- While all trip options do not display (e.g. Northwestern Trailways is missing) a rider can see some trip options

# Bing Maps, Apple, etc.

- [Oak Harbor to Fairhaven – Bing Maps](#)
- [Oak Harbor to Fairhaven – Apple/Hopstop](#)

# What Data is Needed? Stop Locations

stop_id	stop_code	stop_name	stop_lat	stop_lon
148		Transfer Center	46.0661300000000	-118.3423300000000
153		Isaacs @ Stanton	46.0732000000000	-118.3265400000000
155		Isaacs @ Division	46.0742900000000	-118.3197500000000
166		Wilbur @ Blue Mtn Apts.	46.0696206496305	-118.3044639229770
168		Wilbur @ Tacoma	46.0743620000000	-118.3036140000000
169		Isaacs @ Cedar	46.0754000000000	-118.3055700000000
171		Isaacs @ Roosevelt	46.0748800000000	-118.3118200000000
172		Isaacs @ White	46.0748500000000	-118.3162200000000
173		Isaacs @ Division	46.0742500000000	-118.3200700000000
174		Isaacs @ Clinton	46.0737960000000	-118.3231830000000
175		Isaacs @ Penrose	46.0729400000000	-118.3304800000000
176		Main @ Park	46.0719783255076	-118.3330321311950
180		Main @ 6th	46.0647412246719	-118.3443295955650
181		Rose @ 13th	46.0615800000000	-118.3562700000000
182		Rose @ Woodland	46.0606200000000	-118.3597900000000
183		Rose @ Avery	46.0598600000000	-118.3622000000000
184		Rose @ Offner	46.0585200000000	-118.3670300000000
186		Rose @ Hatch	46.0571500000000	-118.3722800000000
187		Rose @ Myra	46.0565800000000	-118.3754200000000
188		College Ave. @ N. W. B Street	46.0520200000000	-118.3887200000000
189		4th @ Collee Ave	46.0445100000000	-118.3887200000000

Online Tools available

<http://www.gpsvisualizer.com/geocode>

# What Data is Needed? Schedules

route_id	service_id	direction_id	trip_head_sign	stop_id	stop_desc	T02	T03	T04	T05
Bus Route:R1w						1W	1W	1W	1W
1W	mtwtf	0	Wal-Mart	239	WWCC (Walla Walla Community College)		6:41:00	7:11:00	7:41:00
1W	mtwtf	0	Wal-Mart	1157	Tausick Way @ Garrison St.		*	*	*
1W	mtwtf	0	Wal-Mart	1158	Tausick Way @ Parrish		*	*	*
1W	mtwtf	0	Wal-Mart	240	Alder @ Berney Dr.		6:48:00	7:18:00	7:48:00
1W	mtwtf	0	Wal-Mart	1159	Alder @ School Ave.		*	*	*
1W	mtwtf	0	Wal-Mart	140	Alder @ Wilbur		*	*	*
1W	mtwtf	0	Wal-Mart	276	Wilbur @ Blue Mtn Apts. (Rt. 1)		*	*	*
1W	mtwtf	0	Wal-Mart	275	Wilbur @ University (Rt. 4)		*	*	*
1W	mtwtf	0	Wal-Mart	168	Wilbur @ Tacoma (Rt. 1)		*	*	*
1W	mtwtf	0	Wal-Mart	138	K-Mart	6:23:00	6:53:00	7:23:00	7:53:00
1W	mtwtf	0	Wal-Mart	1108	Isaacs @ Albertsons	*	*	*	*
1W	mtwtf	0	Wal-Mart	169	Isaacs @ Cedar	*	*	*	*
1W	mtwtf	0	Wal-Mart	235	Isaacs @ Ash	*	*	*	*
1W	mtwtf	0	Wal-Mart	171	Isaacs @ Roosevelt	*	*	*	*
1W	mtwtf	0	Wal-Mart	172	Isaacs @ White	*	*	*	*
1W	mtwtf	0	Wal-Mart	155	Isaacs @ Division	6:32:00	7:02:00	7:32:00	8:02:00

# Data output: Simple Text Files



agency



calendar



calendar\_dates



fare\_attributes



fare\_rules



feed\_info



frequencies



routes



shapes



stop\_times



stops



transfers



trips

# On-line Training Available

- National Rural Transit Assistance Program offers free tools
- [View the Support Center – GTFS Builder](#)
- Most recent New Mexico DOT dataset – timing ~8 x .5 days for ten routes
- Kitsap Transit mentored with me to manage in-house 48 routes & over 1000 bus stops
- All these agencies use simple Excel data tools.  
<http://mjcaction.com/clients.html>

# Other States?

- Massachusetts, Idaho, Oregon
- Sample trip in MA [Provincetown to Logan Airport](#)
- [Idaho 511/Traveler information](#)

# Gaps in the Network

- [Washington State Ferries – data expired?](#)

“This issue with Google Maps is so frustrating, especially since we’re starting to get a lot more calls from people planning ahead for vacations.”

Sue, Customer Service, ***Jefferson Transit Authority***

# WSF Data Was Live

**Google**

Get directions My places

Walk to Edmonds Station  
About 3 mins (52 mins to make transfer)

**Edmonds Station**  
Sounder / North Train towards Everett Station  
4:32pm - 5:04pm (32 mins, 2 stops)

**Everett Station**  
Walk to Everett, WA  
About 10 mins (0.5 mi)

**Everett, WA**

Travel time: about **2 hours 8 mins**

**Local agency information:**  
Contains more information on fares, schedules, and service advisories  
[Sound Transit - \(800\) 201-4900](#)  
[Washington State Ferries](#)

Map data ©2012 Google - Edit in Google Map Maker

# Other Benefits

- Meeting Federal mandates for Title VI (equity) & Low English Proficiency – easy to map routes with this standardized data
- Output of trip planning in variety of languages
- [Spanish](#)
- [Vietnamese](#)
- [German](#)

# Consideration/Next Steps

- Who owns this data?
- Will our next generation of riders ask us for easier to manipulate schedules & simple-clicks on the map to plan a trip?
- Action/Suggest that Department staff develop a policy for any partner that receives public funds to output their data in standardized way

# Questions/Follow-up

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