

Passenger Rail Community Engagement

Existing Conditions and Policy Analysis

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Prepared for:



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Introduction

Passenger Rail Community Engagement Report Overview

The Edina Transportation Commission (ETC) and City of Edina have initiated a study to determine community interest in passenger rail service on the Dan Patch/CP Rail line through the city of Edina. The Passenger Rail Community Engagement Report will answer two questions:

- Should the City request elimination of the “gag rule”?
- Should the City dedicate resources to developing a plan to encourage the development of passenger rail service in Edina?

This reporting process is driven by engagement with the residents, businesses, and decision-makers of Edina. The ETC will examine and document the strengths and weaknesses of passenger rail service in Edina, including thoughtful consideration of the pros and cons that are driven by the city and those influenced by external factors.

Purpose of the Existing Conditions and Policy Analysis

The success of transit locally is based on the existing travel market and land use surrounding stations. A shared regional vision for transit amongst numerous neighboring cities and agency partners is necessary to bring projects to fruition. This memo summarizes the current conditions and policy relevant to the development of passenger rail in Edina.

Existing Conditions and Peer Comparison

Transit service within the Dan Patch Corridor could take a variety of forms. Service types range from intercity rail with daily service, to commuter rail with peak period-focused service, to light rail with frequent all day service.

Table 1: Passenger Rail Characteristics

Mode	Peak Period Frequency	Typical System Length	Relative Capital Cost Per Mile	Average Station Spacing	Tracks Shared with Freight?
Intercity Rail* 	Daily service	50-500 miles	\$\$	 20 miles or longer	Yes
Commuter Rail* 	Every 30+ minutes	20-50 miles	\$\$\$	 7 miles or longer	Yes
Light Rail* 	Every 10 minutes	10-20 miles	\$\$\$\$\$	 1 mile	Possible
Streetcar 	Every 7-15 minutes	1-5 miles	\$\$\$-\$\$\$\$	 1/8 to 1/4 mile	No

Existing Conditions and Policy Analysis

* Vehicle population technology can be diesel, electric, or diesel multiple unit (DMU)

The success of transit in any given corridor is based on the travel demand between origins and destinations along the corridor. The travel demand is driven in part by the density of use along the corridor, especially at station areas. A quarter mile walk is often used as a comfortable distance for walk access to a transit stop/station. Bike and drive access can extend the reach of stations beyond three miles.

Because the Dan Patch Corridor is in very early stages of consideration, service type and station locations are not determined. A comparison was conducted for the land use within one mile of stations at current and planned transit corridors in the Twin Cities region, and a station at Grandview in the city of Edina. The comparison includes population density, household density, and employment density.

Household density (Table 2) varies from over 7 households per acre to about 1 household per 20 acres at current and planned station areas in the current and planned corridors in the Twin Cities region. The Grandview area has about 2 households per acre.

Table 2: Household Density

Transitway ¹	Station Area	Households/Acre
Dan Patch Corridor	Grandview	1.98
Blue Line	38th Street Station	5.05
Blue Line	46th Street Station	3.82
Blue Line	50th Street Minnehaha Park Station	3.38
Blue Line	Airport Terminal 1 Lindbergh Station	0.07
Blue Line	Airport Terminal 2 Humphrey Station	0.05
Blue Line	American Blvd 34th Ave Station	0.26
Blue Line	Bloomington Central Station	0.35
Blue Line	Cedar-Riverside Station	7.32
Blue Line	Fort Snelling Station	0.71
Blue Line	Franklin Avenue Station	6.49
Blue Line	Lake Street Midtown Station	4.85
Blue Line	VA Medical Center Station	2.06
Blue Line Extension	63rd Avenue Station	2.96
Blue Line Extension	85th Avenue Station	1.65
Blue Line Extension	93rd Avenue Station	0.90
Blue Line Extension	Bass Lake Road Station	2.26
Blue Line Extension	Brooklyn Boulevard Station	1.74
Blue Line Extension	Golden Valley Road Station	2.54
Blue Line Extension	Oak Grove Station	0.27
Blue Line Extension	Penn Avenue Station	3.19
Blue Line Extension	Plymouth Avenue Station	2.53
Blue Line Extension	Robbinsdale Station	2.99
Blue Line Extension	Van White Boulevard Station	3.79
Green Line Extension	Bassett Creek Valley Station	6.49
Green Line Extension	Beltline Blvd Station	3.77

Transitway ¹	Station Area	Households/Acre
Green Line Extension	Blake Road Station	2.75
Green Line Extension	Bryn Mawr Station	2.89
Green Line Extension	City West Station	1.22
Green Line Extension	Downtown Hopkins Station	2.88
Green Line Extension	Eden Prairie Town Center Station	1.91
Green Line Extension	Golden Triangle Station	0.48
Green Line Extension	Louisiana Avenue Station	3.02
Green Line Extension	Opus Station	1.85
Green Line Extension	Royalston Ave / Farmers Market Station	6.60
Green Line Extension	Shady Oak Station	2.50
Green Line Extension	SouthWest Station	2.10
Green Line Extension	West 21st Street Station	2.83
Green Line Extension	West Lake Street Station	2.98
Green Line Extension	Wooddale Avenue Station	3.73
Northstar	Anoka Station	1.77
Northstar	Big Lake Station	0.34
Northstar	Coon Rapids - Riverdale Station	1.60
Northstar	Elk River Station	0.25
Northstar	Fridley Station	2.05
Northstar	Ramsey Station	0.34
Northstar/Blue Line/Blue Line Ext/Green Line Ext	Target Field Station	6.11

¹ Green Line was not included because traveling between two downtowns rather than a radial route was not considered a valid comparison.

Population density (Table 3) varies from over 26 people per acre to about 1 person per 6 acres at current and planned station areas in the current and planned corridors in the Twin Cities region. The Grandview area currently has about 5 people per acre with the density forecasted to decrease to 4.7 people per acre in 2040. Four people per acre is a good minimum benchmark for some level of increased investment in higher frequency transit.

Table 3: Population Density

Transitway ¹	Station Area	Year 2010 Persons/Acre	Year 2040 Persons/Acre
Dan Patch Corridor	Grandview	5.02	4.70
Blue Line	38th Street Station	11.27	12.70
Blue Line	46th Street Station	8.43	11.88
Blue Line	50th Street Minnehaha Park Station	7.20	10.12
Blue Line	Airport Terminal 1 Lindbergh Station	0.03	0.02
Blue Line	Airport Terminal 2 Humphrey Station	0.03	0.27
Blue Line	American Blvd 34th Ave Station	0.27	2.34

Transitway ¹	Station Area	Year 2010 Persons/Acre	Year 2040 Persons/Acre
Blue Line	Bloomington Central Station	0.52	2.65
Blue Line	Cedar-Riverside Station	17.60	26.37
Blue Line	Fort Snelling Station	1.34	2.34
Blue Line	Franklin Avenue Station	17.60	23.09
Blue Line	Lake Street Midtown Station	13.33	15.36
Blue Line	VA Medical Center Station	4.00	5.77
Blue Line Extension	63rd Avenue Station	7.44	8.61
Blue Line Extension	85th Avenue Station	4.79	4.92
Blue Line Extension	93rd Avenue Station	2.41	3.99
Blue Line Extension	Bass Lake Road Station	5.50	6.37
Blue Line Extension	Brooklyn Boulevard Station	4.66	4.66
Blue Line Extension	Golden Valley Road Station	6.89	6.83
Blue Line Extension	Oak Grove Station	0.60	4.61
Blue Line Extension	Penn Avenue Station	8.13	8.08
Blue Line Extension	Plymouth Avenue Station	6.94	6.63
Blue Line Extension	Robbinsdale Station	6.91	7.09
Blue Line Extension	Van White Boulevard Station	9.16	14.43
Green Line Extension	Bassett Creek Valley Station	11.49	16.47
Green Line Extension	Beltline Blvd Station	7.06	10.04
Green Line Extension	Blake Road Station	6.06	7.95
Green Line Extension	Bryn Mawr Station	5.65	8.84
Green Line Extension	City West Station	2.05	4.23
Green Line Extension	Downtown Hopkins Station	6.34	7.98
Green Line Extension	Eden Prairie Town Center Station	3.10	8.16
Green Line Extension	Golden Triangle Station	1.05	4.07
Green Line Extension	Louisiana Avenue Station	6.45	8.15
Green Line Extension	Opus Station	3.40	5.05
Green Line Extension	Royalston Ave / Farmers Market Station	10.65	23.70
Green Line Extension	Shady Oak Station	5.48	6.65
Green Line Extension	SouthWest Station	3.92	9.13
Green Line Extension	West 21st Street Station	6.28	8.98
Green Line Extension	West Lake Street Station	6.19	8.69
Green Line Extension	Wooddale Avenue Station	6.97	9.48
Northstar	Anoka Station	3.64	4.44
Northstar	Big Lake Station	1.00	5.31
Northstar	Coon Rapids - Riverdale Station	4.57	5.41
Northstar	Elk River Station	0.69	1.98
Northstar	Fridley Station	4.71	24.52

Transitway ¹	Station Area	Year 2010 Persons/Acre	Year 2040 Persons/Acre
Northstar	Ramsey Station	1.03	N/A
Northstar	Target Field Station	9.95	N/A

¹ Green Line was not included because traveling between two downtowns rather than a radial route was not considered a valid comparison.

Employment density (Table 4) varies from over 39 employees per acre to about 0.75 employees per acres at current and planned station areas in the current and planned corridors in the Twin Cities region. The Grandview area has about 1.6 employees per acre.

Table 4: Employment Density

Transitway ¹	Station Area	Year 2010 Employees/Acre	Year 2040 Employees/Acre
Dan Patch Corridor	Grandview	1.64	1.68
Blue Line	38th Street Station	2.03	2.18
Blue Line	46th Street Station	1.32	1.27
Blue Line	50th Street Minnehaha Park Station	1.68	2.58
Blue Line	Airport Terminal 1 Lindbergh Station	2.65	7.98
Blue Line	Airport Terminal 2 Humphrey Station	2.09	7.43
Blue Line	American Blvd 34th Ave Station	5.03	15.37
Blue Line	Bloomington Central Station	6.54	19.14
Blue Line	Cedar-Riverside Station	27.42	39.79
Blue Line	Fort Snelling Station	1.67	4.68
Blue Line	Franklin Avenue Station	15.26	21.89
Blue Line	Lake Street Midtown Station	5.91	7.53
Blue Line	VA Medical Center Station	1.48	3.32
Blue Line Extension	63rd Avenue Station	1.49	1.72
Blue Line Extension	85th Avenue Station	2.54	3.37
Blue Line Extension	93rd Avenue Station	1.70	4.89
Blue Line Extension	Bass Lake Road Station	1.53	2.04
Blue Line Extension	Brooklyn Boulevard Station	3.07	3.72
Blue Line Extension	Golden Valley Road Station	3.42	3.83
Blue Line Extension	Oak Grove Station	0.79	6.98
Blue Line Extension	Penn Avenue Station	2.94	3.86
Blue Line Extension	Plymouth Avenue Station	2.96	3.59
Blue Line Extension	Robbinsdale Station	1.28	1.99
Blue Line Extension	Van White Boulevard Station	10.37	15.1
Green Line Extension	Bassett Creek Valley Station	7.20	13.82
Green Line Extension	Beltline Blvd Station	3.94	6.88
Green Line Extension	Blake Road Station	3.62	5.04
Green Line Extension	Bryn Mawr Station	3.01	3.56

Transitway ¹	Station Area	Year 2010 Employees/Acre	Year 2040 Employees/Acre
Green Line Extension	City West Station	9.85	16.05
Green Line Extension	Downtown Hopkins Station	4.83	6.15
Green Line Extension	Eden Prairie Town Center Station	6.02	9.33
Green Line Extension	Golden Triangle Station	7.15	12.20
Green Line Extension	Louisiana Avenue Station	6.05	8.29
Green Line Extension	Opus Station	9.74	15.60
Green Line Extension	Royalston Ave / Farmers Market Station	50.40	73.04
Green Line Extension	Shady Oak Station	4.61	6.42
Green Line Extension	SouthWest Station	4.83	8.19
Green Line Extension	West 21st Street Station	3.39	2.93
Green Line Extension	West Lake Street Station	2.43	4.01
Green Line Extension	Wooddale Avenue Station	7.36	10.44
Northstar	Anoka Station	3.97	4.17
Northstar	Big Lake Station	0.17	4.16
Northstar	Coon Rapids - Riverdale Station	3.17	4.41
Northstar	Elk River Station	0.52	0.77
Northstar	Fridley Station	2.26	80.95
Northstar	Ramsey Station	0.67	N/A
Northstar	Target Field Station	56.37	N/A

¹ Green Line was not included because traveling between two downtowns rather than a radial route was not considered a valid comparison.

Comparison Summary

Based on the metrics of household, population, and employment density for the 46 other station areas evaluated, the example station area at Grandview performs as follows:

- Households – 20 station areas (43%) have less or similar household density to the Grandview station area
- Population – The Grandview area currently has about 5 people per acre with the density forecasted to decrease to 4.7 people per acre in 2040. 18 station areas (39%) have less or similar population density to the Grandview station area. This number falls to 13 (28%) in the year 2040. Four people per acre is a good minimum benchmark for some level of increased investment in higher frequency transit. [\[source\]](#)
- Employment – The Grandview area has about 1.6 employees per acre. 12 station areas (26%) have less or similar employment density to the Grandview station area. In 2040, this decreases to 4 station areas (9%).

Based on these metrics, the Grandview station area falls within approximately the bottom 1/3 of the stations studied. Household density is the strongest, while employment density faces some challenges. While these are common metrics, the success of a station at Grandview also is highly dependent on other factors such as end points, type and frequency of service, number of stations, connection to other transit service, etc.

Process and Implementation Timeline

The timeline for implementation of passenger service in the Dan Path Corridor is based on a couple of the transitways that have been implemented in the Twin Cities region. Our experience in the region has been approximately 20-30 years from planning to revenue service. Given that some initial planning has been completed previously, it is reasonable to expect an 8 to 10 year duration to revenue service following removal of the “gag rule.” The removal of the legislation prohibiting study of the Dan Patch Corridor for commuter rail would be the critical first step followed by four planning and engineering steps of varying duration:

- Pre-Project Development Study and Development of Locally Preferred Alternative: 2 years
- Preliminary Engineering and Environmental Documentation: 3 years
- Final Design: 2 years
- Construction and Testing: 2 years

Stakeholder Input

A meeting with local jurisdictional stakeholders was held on Thursday, August 10, 2017. Those in attendance included Mark Nolan, City of Edina; Kirk Roberts, City of Bloomington; Jack Sullivan, City of St. Louis Park; and Joe Gladke, Hennepin County Regional Railroad Authority. Staff from the Minnesota Department of Transportation and Metropolitan Council were also invited, but declined the invitation. Brian Smalkoski from Kimley-Horn and Associates facilitated the meeting.

The discussion focused on two primary questions:

- Since implementation of the “gag rule” in 2002, what have you heard about this corridor? (publicly and politically)
- Within your organization, is there an openness to further study of passenger rail in the Dan Patch corridor?

St. Louis Park noted that they have been focused on Southwest LRT (Green Line Extension). Since the Freight Rail Relocation study there has been an active group called “Safety in the Park.” With this Edina study folks have expressed some concern and there have been additional questions, but nothing really before that. City staff are looking for information to pass back to the community and they have noted interested in a trail corridor as there are limited north-south options with the current design of the city.

Bloomington noted some interest since Edina started this study, but it doesn’t have a position regarding the Dan Patch Corridor. There is a resolution that was passed back around the time of the legislation that also prohibits further study while supporting other transit initiatives. Regarding intercity rail, Bloomington noted that there are negative externalities without the benefit of service. It was also noted that the city is already busy with other transit projects including: Mall of America, 169, 77, and Blue Line.

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Hennepin County noted that their hands are full and this project would be on the back burner. The recent focus has been getting the tax increase passed to fulfill the current transit vision.

Questions during the discussion included:

- Any increase in freight traffic? (Still one train per day)
- Impetus for study? (Grandview transportation study brought the issue to the forefront)
- What if the City Council does not take the recommendation? (That is a possibility)
- Any conversations with the railroad? (During the Grandview study there was a conversation. The railroad noted that they have no plans for passenger service in the corridor).

Stakeholders would like to be kept apprised of study progress, but will remain neutral in the discussions of passenger rail in the Dan Patch Corridor.