

June  
2019

# Service Change Equity Analysis



DETROIT DEPARTMENT OF TRANSPORTATION  
Major Service Change and Reconfiguration  
April 2019

# January 2019 Major Service Change Package

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## INTRODUCTION

The Federal Transit Administration mandates that all primary recipients complete an equity analysis whenever an agency proposes a major service change. As specified in its Public Participation Plan, DDOT defines a major service change as a 25% difference of revenue hours, miles, and trips for weekday, Saturday, or Sunday service. Development, access, and ridership fuel the service change proposal for June 2019.

### *Individual Service Change Proposals*

**10 – Greenfield** proposes to add two weekday morning northbound trips and one Saturday morning northbound trip to provide better access to Providence Hospital. . These additional trips provide more options for customers affected by the proposed change to 16 – Dexter (see below).

**11 – Clairmount** proposes to convert a detour into permanent routing. Sudden development on St Jean between Warren and Jefferson has closed the street to all traffic indefinitely. The current detour follows St Jean to Warren and uses Warren to connect to Conner. Riders can transfer to 13 – Conner to access 11 – Clairmount’s traditional terminal at St Jean and Jefferson. (*Map A 1*)

**16 - Dexter** proposes to change its northern terminal to Northland Dr. from J.L. Hudson Dr at Greenfield. Traffic safety concerns raised by Southfield Police Department have prompted DDOT to relocate 16 – Dexter’s end to a wider street. Riders can access Providence Hospital via a quick transfer to 10 – Greenfield. (*Map A 2*)

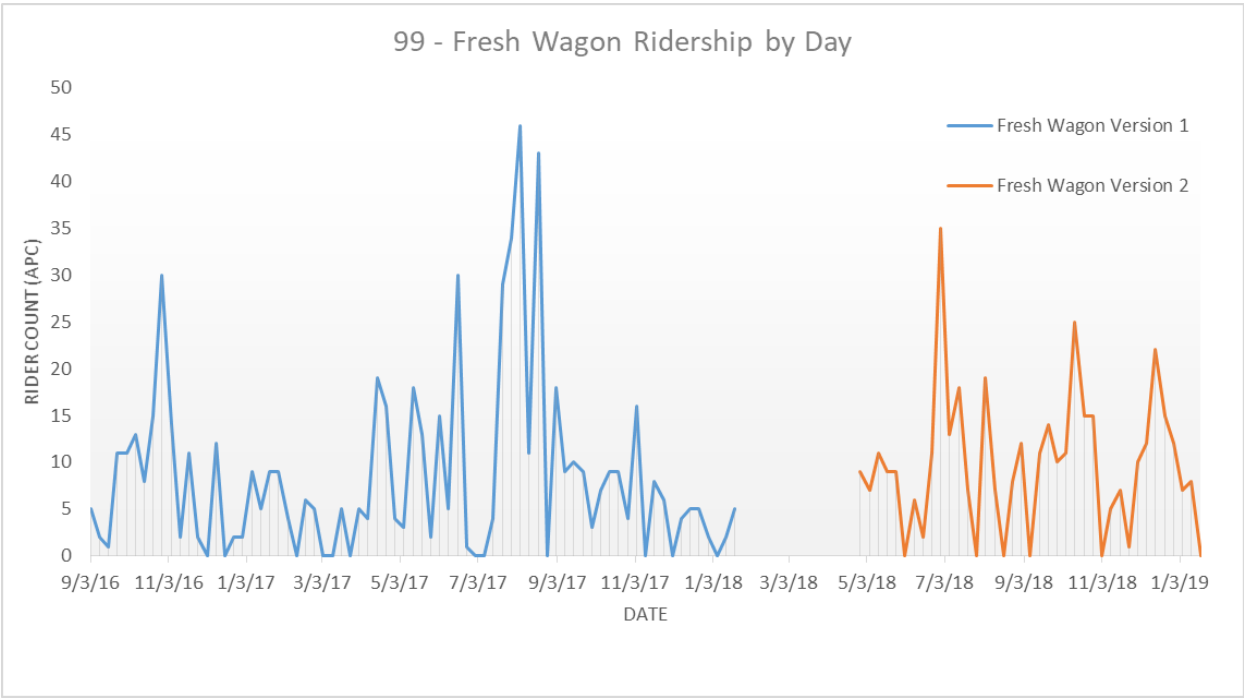
**99 – Fresh Wagon** is a seasonal Saturday service that gives Detroiters better access to Eastern Market, the city’s largest farmers market and a popular destination. The route began in September 2016 in direct response to community input. It started as a pick-up/drop-off service from designated locations around the City. It did not perform as well as hoped.

After a winter hiatus and discussions with stakeholders and riders, Fresh Wagon made its second debut in April 2018, this time as a more intuitive, bi-directional local route that ran on Saturday mornings. Ridership did not improve, still averaging under 2 rides per trip (SEE MAP #####).

After reconsidering the service during this last winter hiatus, DDOT concluded that the minimal ridership does not warrant running 99 - Fresh Wagon and proposes to permanently discontinue it this June.

DDOT will work with the Detroit Health Department to inform riders of alternative service to other grocery stores and other farmer markets throughout the city. Any customer wishing to access the Eastern Market can use full-time routes 6 – Gratiot or 31 – Mack; these routes operate within a few blocks of the market.

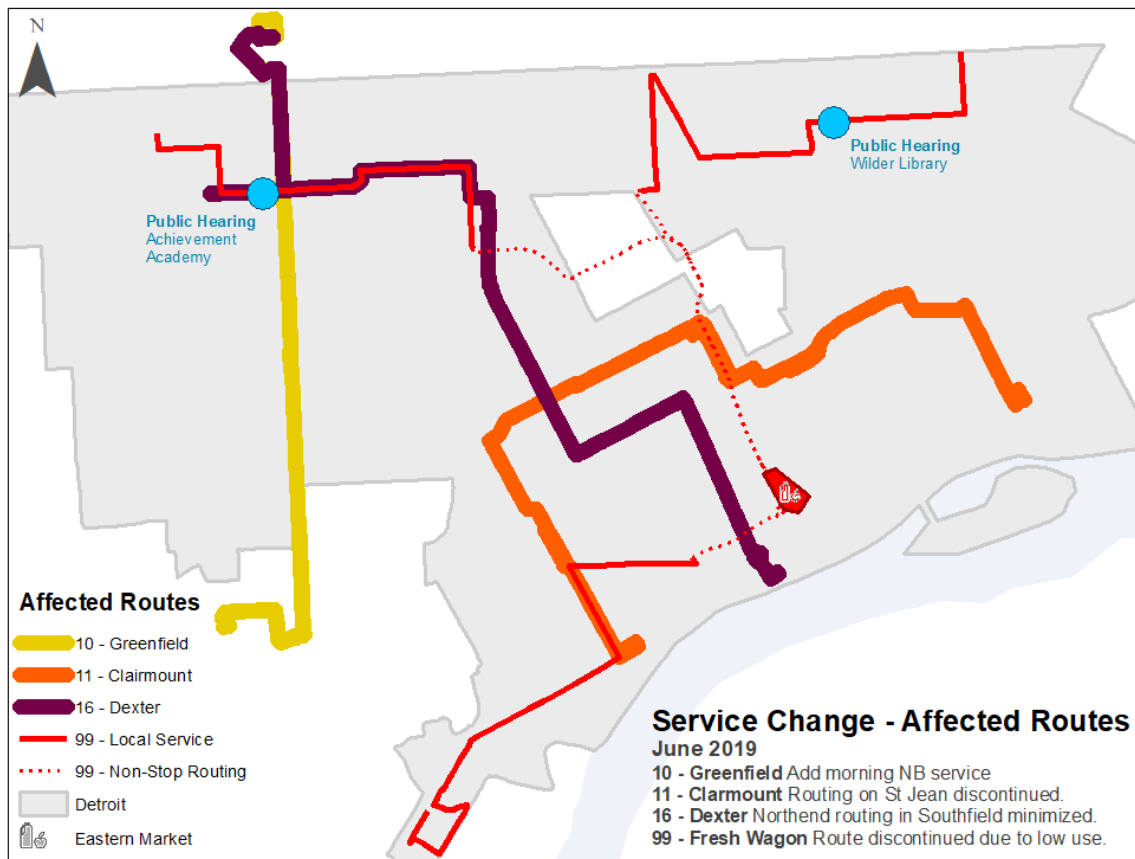
In the future, DDOT intends to develop a regular route with better service to the Eastern Market area.



**COMMUNITY ENGAGEMENT**

According to its public participation plan, DDOT must host daytime and evening public hearings, allowing 15 days for input after the last hearing and put out a newspaper ad five to ten days prior to the hearings. The flyer for the hearings is in Appendix 1.

Both hearings are on May 7<sup>th</sup>, 46 days before the service change on June 22. DDOT staff will be at Wilder Branch Library at 10:30 am and Detroit Achievement Academy at 6:00 pm. See Flyer 1 in the Appendix.



## EQUITY ANALYSIS - DEFINITIONS

Due to Metro Detroit's unique racial and economic makeup, the percent of minorities and the percent of people living under the poverty line are higher than the national average. 80% of DDOT's service area population are minorities and 38% are low-income.

The analysis used ArcMap for Desktop, American Community Survey 2016 population characteristics data, and TIGER 2016 block groups.

This methodology relies on these definitions:

- **Service area** – The service area for this analysis is any block group with a centroid within a half-mile of a stop, or intersect DDOT stops with a search distance of 60 meters to account for street width.
- **Minority population** – Minority counts are based on all individuals classified not as “white only” for race in the ACS 2016 block group data. This methodology does not account for the large concentration of Arab populations in Southwest Detroit and Dearborn who have historically counted as “white” in the census.
- **Low-Income population** – Low-income counts are based on all individuals classified as below poverty for income in the 2016 ACS block group data.
- **Minority and low-income averages** – The total minority population and the total low-income population are each divided by the total population in the system service area to find the system average. The population characteristics are based on ACS 2016 data. The minority average is 80% and the low-income average is 38%
- **Minority route** –A route that has at least 1/3 (33%) of its total revenue mileage in census blocks, block groups, or traffic analysis zone(s) with a percentage of minority population that exceeds the system wide average. DDOT uses block group level data.
- **Low-Income route** – The FTA defines this as a route that has at least 1/3 (33%) of its total revenue mileage in census blocks, block groups, or traffic analysis zone(s) with a percentage of below-poverty population that exceeds the system wide average. DDOT uses block group level data.
- **Disparate Impact and Disproportionate Burden** – A facially neutral policy or practice that negatively affects members of FTA protected populations. Disparate impact is based on minority populations and disproportionate burden is based on low-income populations. The impact on these vulnerable populations should be no less than 25% of the impact on non-vulnerable populations. For example, if the percent change in improved service for non-protected populations is 100%, the percent change for protected populations should be no less than 75%. If the percent of change for vulnerable populations is less than the threshold, there may be a disparate impact or disproportionate burden. If either occur, DDOT must present legitimate justification, mitigation efforts, and discuss alternatives that were not pursued.

## EQUITY ANALYSIS – ANALYSIS

### Percent Change

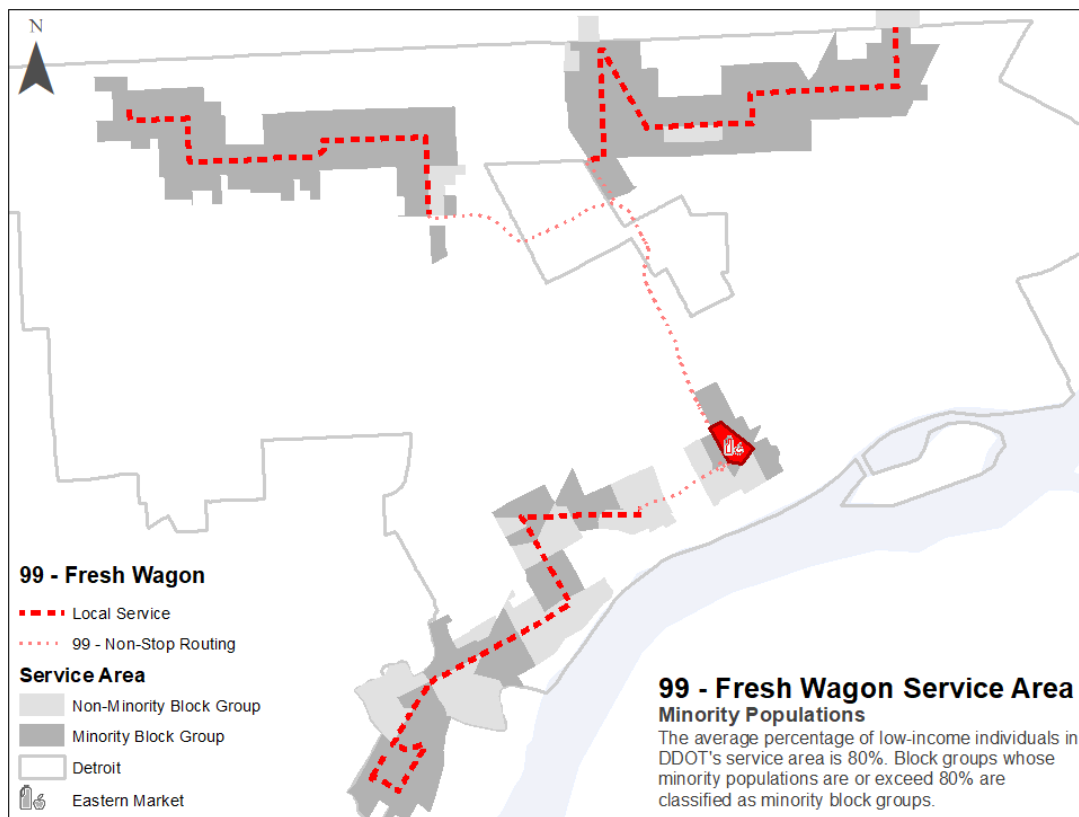
Of the four affected routes, only 99 – Fresh Wagon reached or surpassed the major service change threshold of 25%. Data informing the percent changes can be found in tables A1, A2, and A3 in the Appendix.

### Percent Difference by Route – Proposed vs Current Service

Route		Weekday			Saturday			Sunday		
		Hours	Miles	Trips	Hours	Miles	Trips	Hours	Miles	Trips
10	Greenfield	1.36%	1.51%	1.49%	0.93%	1.01%	0.99%	0.00%	0.00%	0.00%
11	Clairmount	-5.92%	-7.61%	0.00%	0.00%	0.00%	0.00%	-2.76%	-1.48%	0.00%
16	Dexter	-3.23%	-3.00%	0.00%	-0.24%	1.05%	0.00%	-0.27%	0.61%	0.00%
99	Fresh Wagon	0.00%	0.00%	0.00%	-100.00%	-100.00%	-100.00%	0.00%	0.00%	0.00%

### Classification

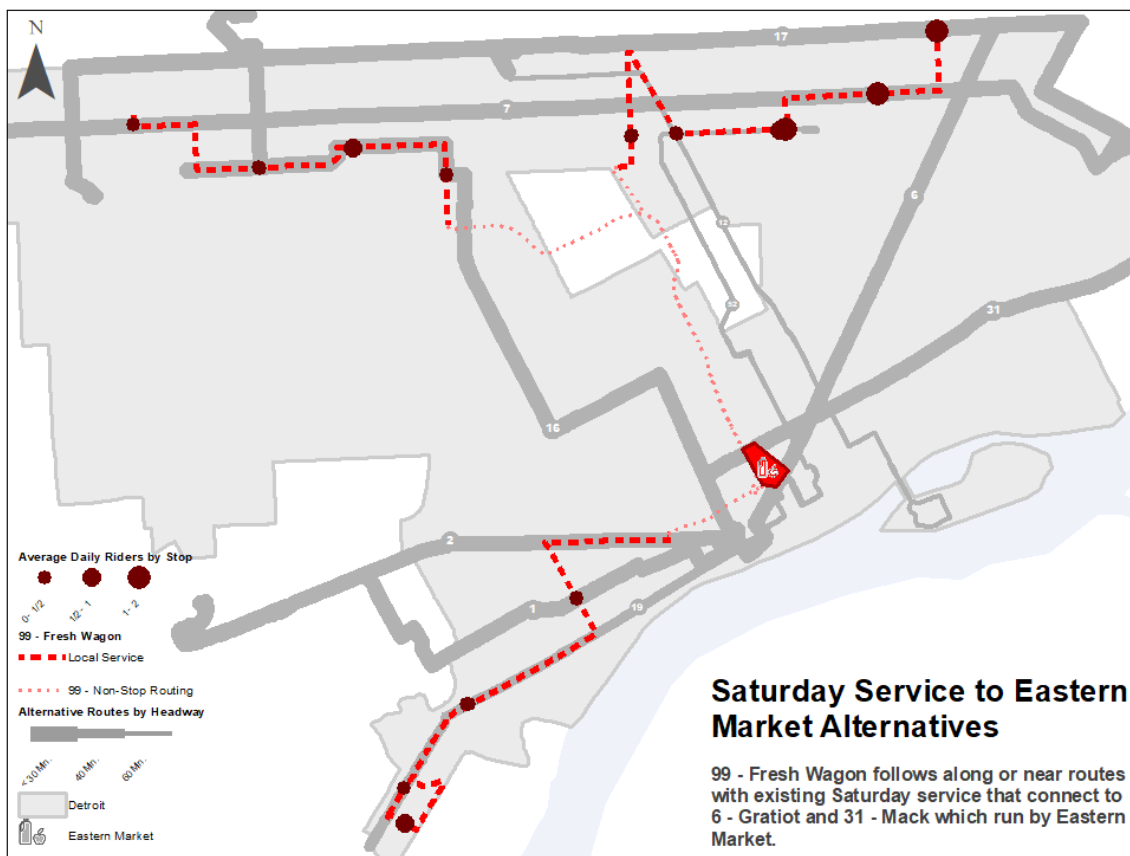
Of DDOT's 43 routes, 41 are minority routes, and 37 are low-income routes because one third (33%) of their routing travels through minority block groups. All are classified as minority, low-income, or both. 87% of 99 – Fresh Wagon travels through minority block groups and 43% travels through low-income block groups, making it both a minority and low-income route. See Map A 3 for low-income populations.



## CONCLUSION & MITIGATION

Discontinuing 99 - Fresh Wagon removes service classified as minority and low-income. This creates an FTA defined disparate impact and disproportionate burden. However, it does not remove service from these populations or the few riders who chose to utilize the service. 99 – Fresh Wagon is a specialized service to Eastern Market and follows roads with established local DDOT service. Riders can take 6 – Gratiot or 31 – Mack directly to Eastern Market, and use other routes to make a quick transfer with these two routes.

Creating and promoting the service led to a stronger partnership with the Detroit Health Department, which shares the goal of informing and connecting citizens to healthy food. The idea for 99 – Fresh Wagon started as a way to connect Detroiters to fresh healthy affordable food. Though the service was not as popular as expected, both departments will continue working together in informing riders where and how to access groceries outside of Eastern Market and create routes that better serve existing, and closer, resources.





## APPENDIX

Table A 1 - Revenue hours based on day type. Routes with a percent change over 25% are included in the analysis.

**Revenue Hours**

		Weekday			Saturday			Sunday		
		Current	Proposed	% Change	Current	Proposed	% Change	Current	Proposed	% Change
<b>10</b>	Greenfield	114.25	115.80	<b>1.36%</b>	80.28	81.03	<b>0.93%</b>	No Change		
<b>11</b>	Clairmount	40.23	37.85	<b>-5.92%</b>	No Service			No Service		
<b>16</b>	Dexter	194.27	188.00	<b>-3.23%</b>	97.58	97.35	<b>-0.24%</b>	90.12	89.88	<b>-0.27%</b>
<b>99</b>	Fresh Wagon	No Service			9.00	0.00	<b>-100.00%</b>	No Service		

Table A 2 - Revenue miles based on day type. Routes with a percent change over 25% are included in the analysis.

**Revenue Miles**

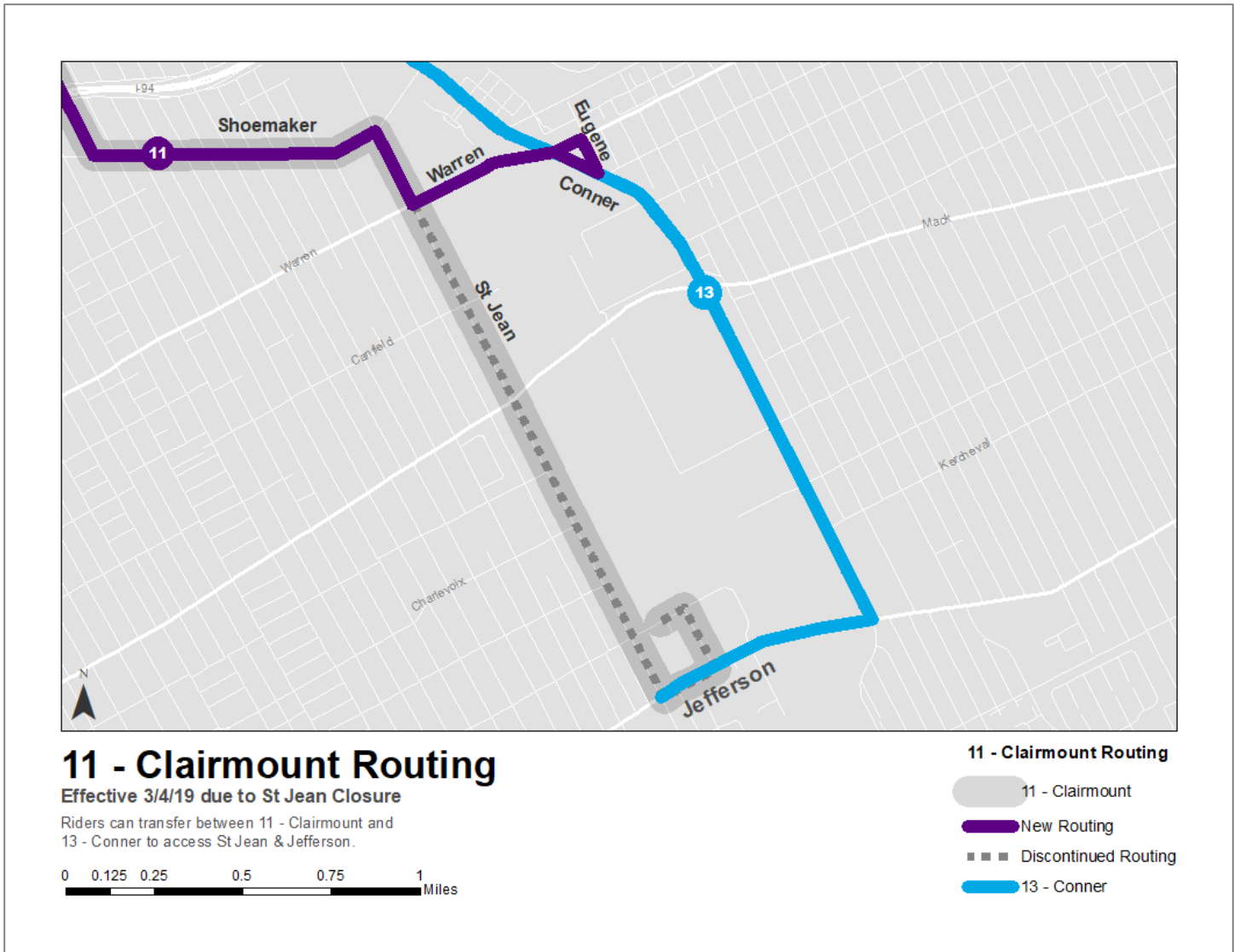
		Weekday			Saturday			Sunday		
		Current	Proposed	% Change	Current	Proposed	% Change	Current	Proposed	% Change
<b>10</b>	Greenfield	1,743.44	1,769.78	<b>1.51%</b>	1,308.23	1,321.40	<b>1.01%</b>	No Change		
<b>11</b>	Clairmount	665.71	615.04	<b>-7.61%</b>	No Service			No Service		
<b>16</b>	Dexter	2,536.11	2,460.14	<b>-3.00%</b>	1,464.55	1,479.92	<b>1.05%</b>	1,395.82	1,404.34	<b>0.61%</b>
<b>99</b>	Fresh Wagon	No Service			186.87	0.00	<b>-100.00%</b>	No Service		

Table A 3 - Revenue trips based on day type. Routes with a percent change over 25% are included in the analysis.

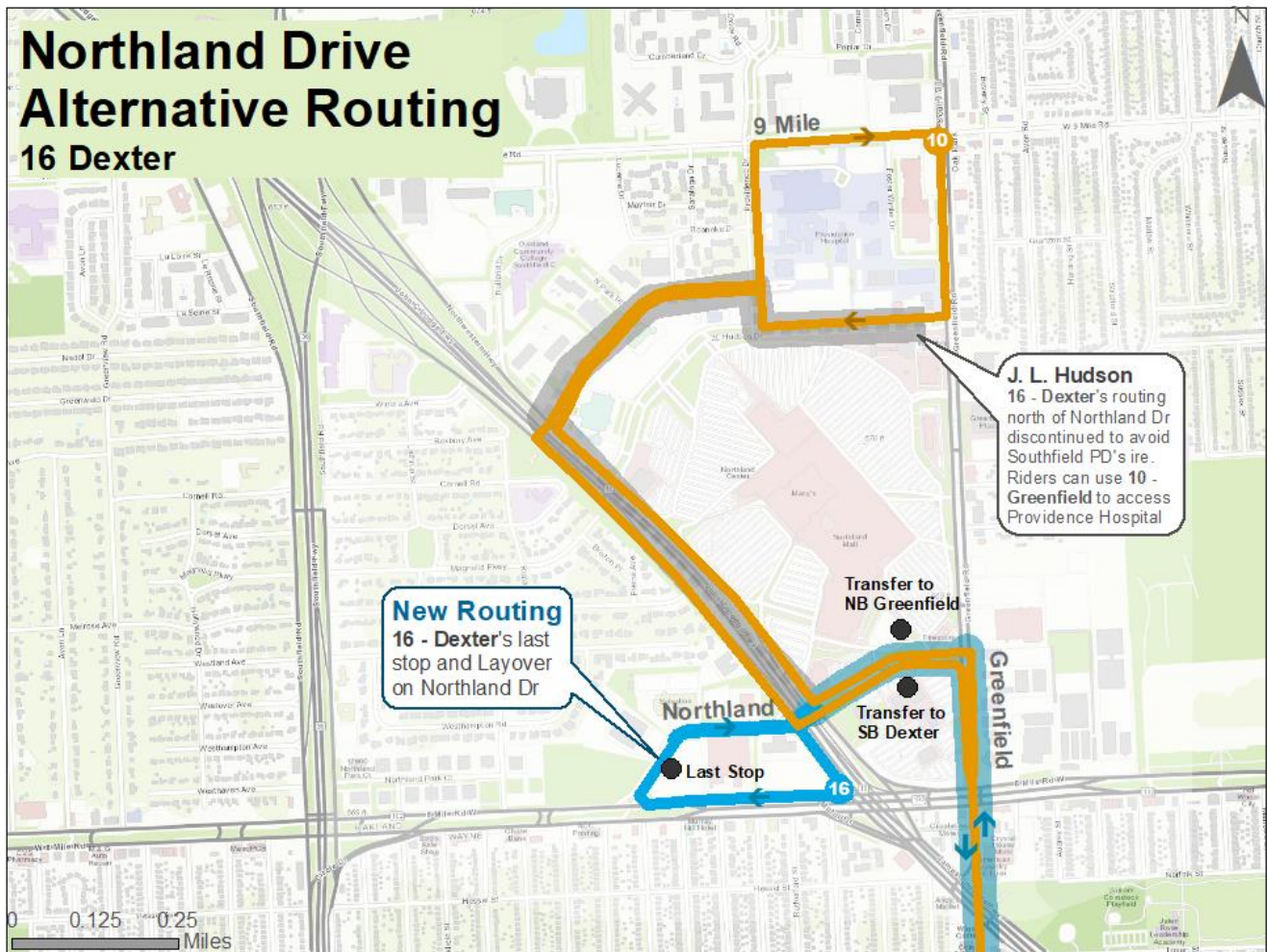
**Revenue Trips**

		Weekday			Saturday			Sunday		
		Before	After	% Change	Before	After	% Change	Before	After	% Change
<b>10</b>	Greenfield	134	136	1.49%	101	102	0.99%	No Change		
<b>11</b>	Clairmount	41	41	0.00%	No Service			No Service		
<b>16</b>	Dexter	148	148	0.00%	79	79	0.00%	75	75	0.00%
<b>99</b>	Fresh Wagon	No Service			12.00	0.00	<b>-100.00%</b>	No Service		

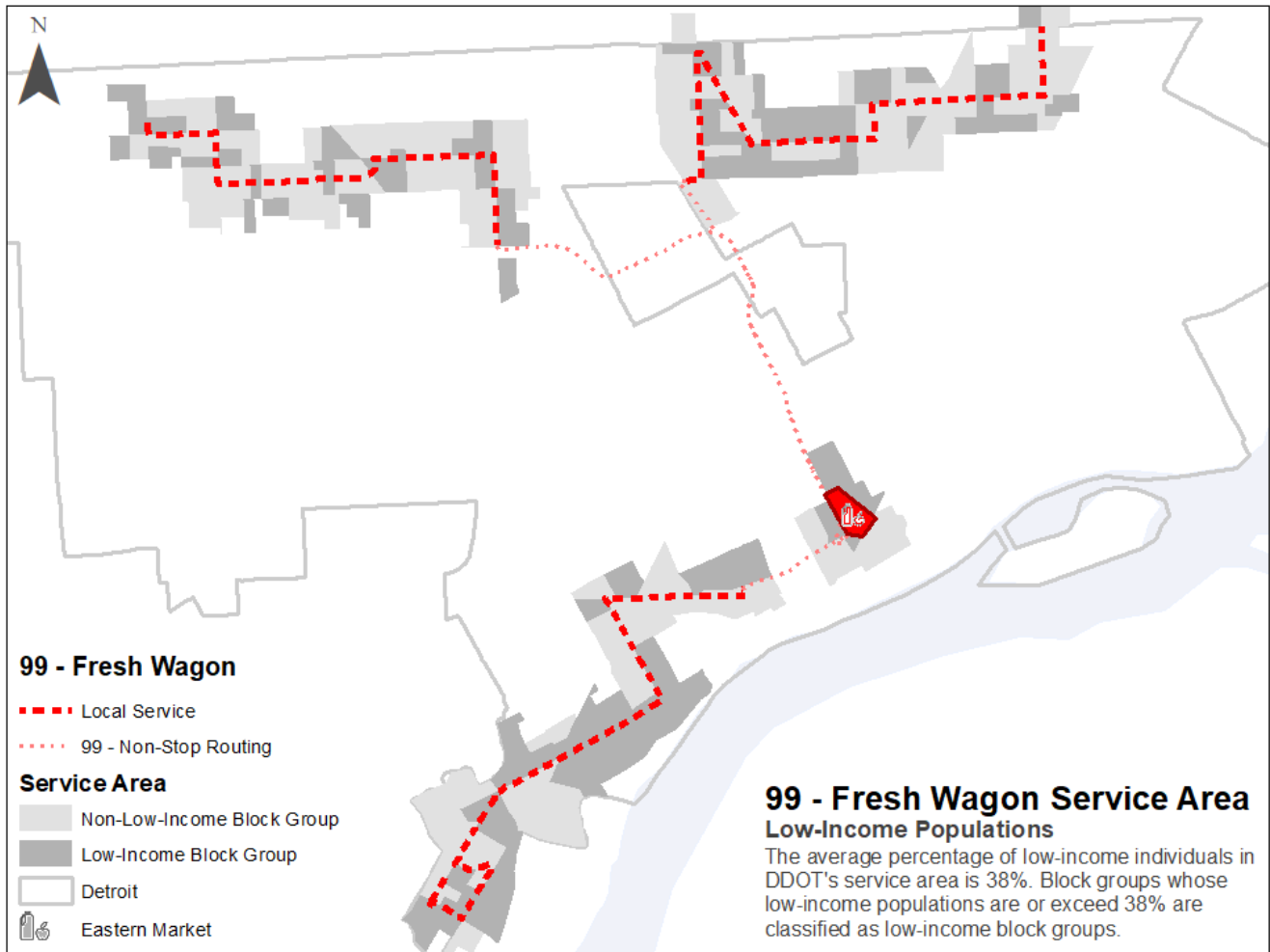
Map A 1 - Alternative access to St Jean & Jefferson via 13 – Conner due to long-term development on St Jean south of Warren.



Map A 2 – Layover conflicts with Southfield Police Department have prompted DDOT to move the north end of 16 – Dexter to Northland Dr. Riders can make a quick transfer to 10 – Greenfield to access Providence Hospital.



Map A 3 - 43% of 99 - Fresh Wagon travels through low-income block groups, classifying the service as low-income.





# Public Hearings

DDOT is proposing a series of transit service changes to take effect on **June 22, 2019**.

*Proposed changes affect these routes:*

- 10** Greenfield
- 11** Clairmount
- 16** Dexter
- 99** Fresh Wagon

*Attend a hearing to tell us your thoughts:*

**May 7 – 10:30am**  
Wilder Branch Public Library  
7140 E 7 Mile

**May 7 – 6:00pm**  
Detroit Achievement Academy  
7000 W Outer Dr

*Any person who needs accommodation to participate in this meeting, including persons with disabilities, may contact DDOT at 313.933.1300 or [ddot-ada@detroitmi.gov](mailto:ddot-ada@detroitmi.gov) to request assistance at least 5 days in advance of the meeting.*

*Cualquier persona que necesita acomodación para participar en esta reunión, incluso las personas con discapacidades, pueden contactar a DDOT al 313.933.1300 o [ddot-ada@detroitmi.gov](mailto:ddot-ada@detroitmi.gov) para pedir asistencia al menos 5 días antes de la reunión.*

اگر آپ کو شرکت کرنے کی ضرورت ہے یا کسی اور کو مدد کی ضرورت ہے، تو براہ کرم کم از کم 5 دنوں پہلے ڈی ڈوٹ ڈی ایم سی کے ساتھ رابطہ کریں۔ براہ کرم [ddot-ada@detroitmi.gov](mailto:ddot-ada@detroitmi.gov) یا 313-933-1300 پر رابطہ کریں۔

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