

Study of the consequences for the Plainfield Co-op deriving from the interruption of the bridge between Plainfield Main St. and US Hwy 2.

Foreword

The Agency of Transportation of the State of Vermont is planning a restructuring of the intersection of Main Street and US Hwy 2 in Plainfield, VT. The construction of the new intersection would halt access to and from US Hwy 2 for the portion of the village on the left bank of the river. The works are planned to start in the year 2023 and will last a few months.

The Plainfield Co-op, a few other businesses, the Town Office, the Fire Department will be cut off from US Hwy 2 for the duration of the construction.

The consequences for the Plainfield Co-op are of extreme concern to the Members, the Board, and the Management. These consequences can be summarized in a few lines:

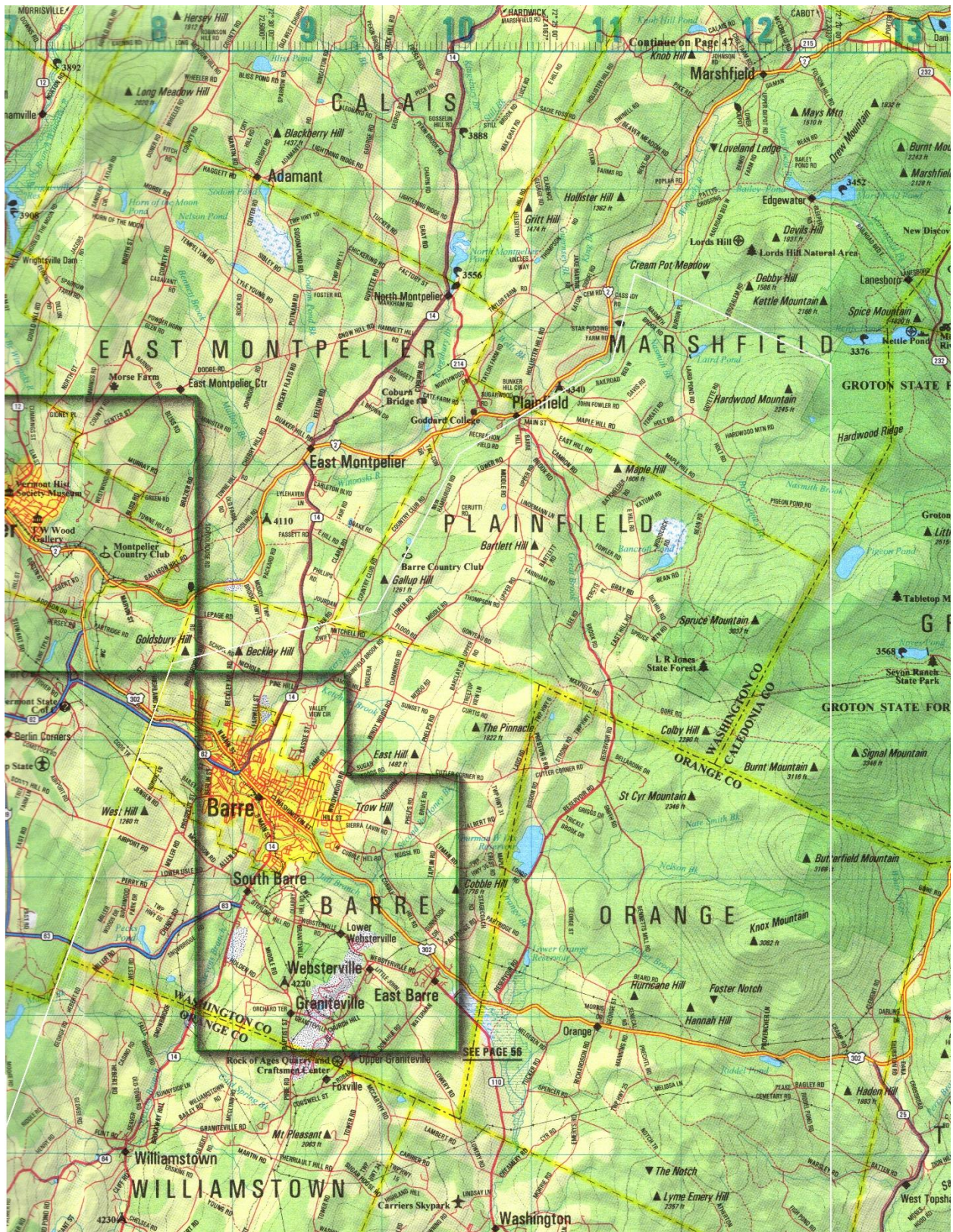
- The Members, the non-Member customers, and the co-op employees that normally drive to the co-op from the areas and villages on right side of the river and from US Hwy 2 in general, will not be able to reach the co-op without taking long and time-consuming detours.
- Inevitably a large portion of the co-op customers will be forced to find alternative, more convenient businesses for their shopping needs. This will generate a loss of revenues, that in some case may become permanent. The reduction in revenues will force the co-op to reduce staff and expenses in order to remain viable.
- Local suppliers and other suppliers of the co-op will also take long detours to resupply the co-op operations, and those suppliers that operate 18 wheelers trailer trucks may be completely prevented from resupplying the co-op. Most of the alternative roads to reach the co-op are not rated for this type of traffic.
- The cost of resupplying the co-op will inevitably increase, due to higher mileage, or due to the need of transferring supplies from a large vehicle to a smaller one.

This study addresses the above concerns and tries to evaluate and quantify the potential impact of the bridge interruption on the co-op operations.

Assumptions

Geography and Territory

The position of the co-op and the geography of the territory determine what members and customers can continue to shop at the coop as normal, and what members will be prevented from reaching it. Naturally if anyone wants to drive to the co-op by taking a long detour the possibility is there. The possible detours lengthen the drive and all of them include a dirt road normally dedicated to local traffic. Everyday life though, is hectic enough to prevent people from wasting time and gas for the sole purpose to shop at the Plainfield Co-op, considering that there are other co-ops in the area that offer an easier and valid alternative to Plainfield Co-op.



Map 1

Based on the criteria mentioned above, the line that separates the non-disrupted geographical area from the area disrupted by the bridge interruption is the thin white line in Map 1.

The non-disrupted area includes the southernmost portion of the town of Marshfield on the left side of the Winooski river, most of the town of Plainfield with the exception of the portion on the right side of the Winooski river, Barre Town, Barre City, Orange, Williamstown, and Washington.

The only access roads to the Plainfield Co-op during the bridge interruption will be Nasmith Brook Rd, Laird Pond Rd, Holt Rd, John Fowler Rd, Maple Hill Rd, East Hill Rd, Brook Rd, Upper Rd, Middle Rd, and Lower Rd. All of these roads are dirt roads and the bridges and culverts are not designed for heavy traffic.

The disrupted area is East, North, and West of the white line in Map 1, and affects members and customers that include most of the town of Marshfield, and the towns of Berlin, Montpelier, East Montpelier, Calais, Cabot, Danville, and St. Johnsbury.

Co-op Members and Customers - Revenues

The co-op members and customers that are actively shopping at the Plainfield Co-op have been separated in 6 categories, based on the most recent records available at the co-op (2019):

1. Members that live within the area not affected by the bridge interruption.
2. Members that live in the area affected by the bridge interruption.
3. Members whose address is a P.O. Box or members that did not provide an address.
4. Members that live more than 40 miles away from the co-op.
5. Members of co-ops that have a reciprocity agreement with the Plainfield Co-op and occasionally shop at the Plainfield Co-op.
6. Non-member customers.

The 2019 revenues on record from the above categories have been divided in two (2) separate amounts:

- A) revenues that will not be affected by the bridge interruption.
- B) revenues that will be affected by the bridge interruption.

The following criteria have been used:

- 100% of the revenues from category 1 members have been applied to the amount A.
- 100% of the revenues from category 2 members have been applied to the amount B.
- 100% of the revenues from members of the other co-ops (category 5) have been applied to the amount B since all of those coops are in the geographical area affected by the interruption of the bridge.
- 100% of the revenues from category 4 members have been applied to the amount B.
- The revenues from category 3 members and from non-member customers (category 6) have been partially applied to the amounts A and B, based on the following criteria:
 - using the known revenues from members belonging to category 1 and 2, the calculated percentage of these revenues coming from the non-affected area (A) and from the affected area (B) are 60.5% and 39.5% respectively.
 - accordingly, the revenues from category 3 members and from non-members have been applied to amounts A and B using the above calculated percentages.

- The revenues from non-member customers have been calculated as the difference between the total revenues for 2019, and the revenues from members of the Plainfield Co-op and from the members of the other co-ops.

The above criteria is not perfect, though the logic of the criteria delivers a fair approximation of the impact the bridge interruption has on the Plainfield Co-op.

Period and Duration of the Bridge Interruption – Closing or Not

The impact and the potential loss of revenues are dependent on two factors: the duration of the interruption, and the period when such interruption will occur. It has been assumed that the works on US Route 2 will be done during the period that goes from May to September. Sales at the Plainfield Co-op follow a predictable seasonality, therefore, after making a compilation of the sales month by month for the years 2016, 2017, 2018, and 2019 to determine an average of how sales change during the months considered in this study, this seasonality has been applied to different durations and different periods. The durations and periods used are the following:

- Three (3) periods of three (3) months each.
- Two (2) periods of four (4) months each.
- One (1) period of five (5) months.

During the works on US Route 2 the Plainfield Co-op has two choices: 1) keep the store open and sustain the majority of the fixed expenses while revenues are reduced, or 2) close the store completely.

The loss of revenues had been calculated for each of the period + duration combination, and for both eventualities of store open and store closed.

Conclusions

The numerical results of this study, limited to the monetary impact on revenues, are summarized in the Annex. Other conclusions are worth of notice.

The Plainfield Co-op has a total of 1080 members on record, of which 752 have been active in 2019. Only the active members have been taken in consideration in this study.

Of the 752 active members, 362 live in the non-affected area, 304 live in the affected area, 75 have a P.O. Box address or did not offer any address, 7 have an address that is more than 40 miles away from the co-op.

60.5% of the revenues come from non-affected area. 39.5% of the revenues come from the affected areas.

85.7% of member revenues come from members of the Plainfield Co-op, 14.3% of the revenues come from members of the other co-ops.

24.1% of the total revenues come from customers that are not members (of our co-op, nor of the other co-ops).

The decision to remain open during the interruption or to close altogether, depends in part from the numbers of this study, but it also depends on other very important factors:

- The co-op employs management and staff that count on their job and their salaries to maintain their families.
- What will happen to the supplies? Will the suppliers be able to secure continuity? At what cost?
- Certain fixed expenses will continue to run, even if the co-op will decide to close.
- Members and customers in the affected areas will find alternative ways to procure the food and the products they are currently purchasing from the co-op.
- Members will temporarily lose the benefits they receive as members or working members.
- The loss in revenues will most certainly determine a net income loss at the end of the affected fiscal year. The amount of such loss can only be determined once the fiscal year terminates.

It must be noted that the impact is not only financial. Besides temporarily Inconveniencing members and customers, the effects of the bridge interruption may affect the customer base of the co-op well after the end of the works on US Route 2, and some of the consequences may become permanent.

Submitted to the Plainfield Co-op Board of Directors and to the Management
March 5, 2020

Giordano Checchi, Treasurer

Enclosure: Annex

