Economic Impact of Prospective School Closures in North Stormont, Ontario

Final Report



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Introduction and Objectives

Doyletech was contracted by the Township of North Stormont to do an economic impact assessment of prospective school closures in North Stormont, as proposed by the Upper Canada District School Board (UCDSB) in their report to Trustees "Building For the Future – Pupil Accommodation Review" dated Sept 28th, 2016. The objective of this engagement was:

- To illustrate how the proposed closures would impact the economy in North Stormont (including direct, indirect and induced effects); and
- To provide decision-makers with additional information beyond the financial framework assumed by the PAR that the community believes needs to be considered in making any definitive choices regarding UCDSB school rationalization.

A critical issue with Tagwi Secondary School is *boundaries*. At present Tagwi has a mandate to include students coming from South Stormont as well as North Stormont, in respect of French Immersion programming, and key trades (shops) programming. This amounts to approximately 167 students out of the 502 (521) total.

- The PAR suggests that these students should be moved to Cornwall-area schools, specifically CCVS. In turn, this may help proposals that a new, larger high school be built in that city.
- For Tagwi, lost students could be made up by importing students from North Glengarry, following a prospective closure of North Glengarry District High School in Alexandria. But this is not assured.
- If so, Tagwi will be reduced to approx. 333 students. This could be below utilization benchmarks, prompting possible closure consideration. We explore this possibility in our second scenario.

Background to Issue of School Closures

- Upper Canada District School Board (UCDSB) in 2016 began a process of rationalizing their student population with the spaces available in their school inventory.
- UCDSB released a report in September 2016 "*Building for the Future* Pupil Accommodation Review" which called for the closing of up to 29 schools.
- In North Stormont, North Stormont Public School was proposed for closure and the students consolidated at Roxmore Public School.
- Collectively, the UCDSB and the Ontario Ministry of Education have set out a process for evaluating the rationalization proposals, which includes a significant public consultation element.
- Notwithstanding the public consultations, the process does not afford any mechanism to evaluate the local social, cultural, or economic impacts of the proposed closures. The process dictates that school closures are to be evaluated solely on their impact on learning and the funding envelope for education provided to the board.
- This report has been prepared to provide input in anticipation of the process being adapted to include impacts outside the existing education budget of the UCDSB.

North Stormont School Closure Scenarios

Scenario I:

As per the UCDSB's PAR, close North Stormont Public School and consolidate the students in Roxmore Public School which is also in North Stormont.

- 67 students affected.
- 14 staff affected, including teachers.
- Annual school operating and maintenance budget calculated at \$948,000 will be affected.
- 5 year facility renewal plan (estimated at averaging \$295,000 annually), which would have provided opportunities to local contractors, will be lost.

Scenario II:

In addition to the current PAR recommendation, a hypothetical counter proposal to close Tagwi Secondary School.

- 502 students affected (according to the PAR number that we used; actually it is slightly more).
- 52 staff affected, including teachers. While some staff will be relocated, we estimate at least 3 permanent positions, currently filled by local area residents, will be lost.
- Annual school operating and maintenance budget calculated at \$5.3 million will be affected.
- 5 year facility renewal plan (estimated at averaging \$1.5 million annually), which would have provided opportunities to local contractors, will be lost.

Our Methodology – the Doyletech EconWin Model

- Doyletech used its **EconWin** computer econometric model for developing this impact study. This model is specifically designed for assessing the incremental economic impact of a new capital investment change within smaller communities of approximately100,000 or less. (It can also certainly be run for larger economies if needed.)
- EconWin is an econometric model that is able to isolate individual investments (such as an investment in public infrastructure) and then calculate, under a variety of scenario conditions, what the returns would be to the local community as a whole in terms of increased economic activity. It can also be used to assess shutdowns of existing organizations or installations.
- As well, the model differentiates between the "local" economy and the surrounding "regional" economy. For purposes of running the model, Doyletech defined the "local community" and "local economy" as consisting of the Avonmore – Berwick corridor and the immediate area around it. The "regional economy" was taken as the remaining part of North Stormont.
- The model integrates key exogenous inputs such as the value of operating labour (teachers and staff) and projects forward, using endogenous economic multipliers, the value of eventual total impacts such as number of jobs lost, value of lost local spending, and loss of current municipal taxes generated. The model calculates "indirect" and "induced" economic effects, taking into account the "downstream" multiplier effects from the original shut down.

Our Methodology (Continued)

- It was necessary to run the model to incorporate two key effects:
 - First, lost income the ongoing impact of the elimination of operational spending, consisting of staff salaries, maintenance and operations spending, etc., that will now be lost to the local economy.
 - Second, the reduction in renewal spending. It seems reasonable to project that the school board will now spend only as required to maintain the building in a safe condition, but not to improve or renew it. Accordingly, spending for major repair and construction projects related to maintaining and improving the state of the school will now be lost to the local community
 - In the scenario where students and staff would be added to the region (as in the current PAR recommendation) we have explored these effects in the positive sense.
- The critical data concerning the parameters of the school closure was obtained from publicly available UCDSB finance documents. This data was augmented by face to face interviews with local stakeholders (businesses, education related local residents, municipal officials, and community activists).
- From previous similar projects, Doyletech believes that the data values used are reasonable, although they cannot be guaranteed. Specifically, none of the impacts is absolute (e.g., not every teacher in a closed school will move out of the local region and take 100% of their day to day spending with them). Nevertheless, Doyletech believes they are reasonable forecasts for purposes of prospective decision-making by funders.

The Range of Economic Impacts

The economic impacts we have assessed are driven by two principal factors:

- Factor 1 Reduced local spending by the school: If the school is closed, the local impact of teacher and other staff salaries, maintenance and operations spending, and renewal spending is impacted. The result is not an absolute. Some teachers may not move closer to their new school and even an empty building will need to be heated and maintained to a certain degree. We have accounted for these factors in our model runs. An increase in spending has the opposite positive effect.
- Factor 2 Reduced spending by local residents and local organizations: Often called "induced" or "indirect" effects, they reflect the fact that if a local business that had been relying on the school for a significant portion of its business loses those customers, it in turn spends less. These factors can often equal the direct effects in magnitude.

As well, in Scenario II whereby the high school closes, it must be recognized that it links strongly to the local economy. It is a vital institution for local sustainability:

- Local businesses rely on the school's co-op programs. These will be completely jeopardized by students' new, inevitably long, bus rides;
- The most important employers in North Stormont mostly demand high-school graduation and even computer literacy for all their staff, and rely Tagwi to provide same.

Key Parameters and Assumptions – Operational Spending

- Absent school-by-school spending details, we have built an operational spending model using other board budget documents:
 - Staffing numbers (teachers, non-teachers, admin and support categories) were taken from school profiles.
 - Board wide average salaries were taken from UCDSB technical budget documents.
 - Utility costs were taken from school profiles.
 - Supply and services per individual school were calculated from the total board maintenance and operations budget (less salaries and utilities), prorated across all schools by school size.
- Collectively, these values were used to calculate the total spending per school.
- Closure impacts in general assumed 60% of staff live in the local area, and that following a closure, 50% of those will move out of the local area within 5 years to be nearer to their new school.
- We assume most custodial jobs and principal administrative jobs will be eliminated following a closure.

Key Parameters and Assumptions – Renewal Spending

- For Renewal Spending, we used the corresponding Feeder Group 5 Year Facility Renewal Plan.
- For each school we annualized the impact of that spending.

Key Parameters and Assumptions – Scenario I Additional Spending Losses

We calculate that there will be key spending losses beyond those directly related to school operations, in regards to North Stormont Public School, as follows:

- Our surveys and interviews across Eastern Ontario indicate that there is a consistent pattern of spending by students and their families during school days at local convenience stores and groceries for lunches, snacks, and refreshments. For North Stormont, this could amount to approximately \$5,000 annually.
- Closure of the school would cause the loss of the principal's position and a caretaker position.
- Closure of the school could impact the sale of homes in development in nearby Crysler. If sales were reduced by even just two families, the impact on the local community would be:
 - Loss of \$120K in annual spending;
 - Loss of \$400K in construction spending (land, materials, labour);
 - Loss of 2 construction jobs.

Prepared for the Township of North Stormont

Key Parameters and Assumptions – Scenario II Additional Spending Losses

We calculate that there will be key spending losses beyond those directly related to school operations, in regards to Tagwi, as follows:

- Our surveys and interviews across eastern Ontario indicate that there is a consistent pattern of spending by high school students during school days at local convenience stores and groceries for lunches, snacks, and refreshments. For about half the total student population, these amount to \$10 per student per school day, times the 200 school days. For Tagwi, this would also include the school's cafeteria. This would be 502 students spending **\$500,000** annually.
- Local businesses would also suffer serious loss from parents no longer patronizing local stores and restaurants at times of drop-off and pick-up. They will tend to shop where the students are now located (e.g., Cornwall or Winchester).
- This will be especially important for extra-curricular activities, such as hockey, music, theatre, and after-hours courses. Tagwi offers a substantial range of such extra-curricular activities, ranging from guitar through food-preparation to photography. If spending was reduced by the equivalent of just six businesses losing 20% of ongoing revenues, and each had revenues of about \$500,000, the total loss would be **\$600,000**.
- It is likely some families will move out of North Stormont in case of either scenario, especially Scenario II. If 10% of all student families leave, this will represent a loss of about 30 families, or **\$1.8 million**.
- Property values will decline. If the number of properties for sale doubled (e.g., from 35 to 70) as families moved out, prices would have to lower significantly.

Model Results Scenario I: Closure of North Stormont P.S.

The overall net negative results (from the perspective of the local communities) have been identified as:

- There would be net job loss of **5 Full Time Equivalent (FTE) jobs** in North Stormont.
- Total **net spending decrease** within the region and locality was **\$1.6 million**. This is a very large economic hit for the local community to absorb.
- The **net municipal** government decrease was **\$13,000**. This reflects decreased property tax collections, and multipliers from indirect spending lost.
- The **net provincial** government decrease was **\$190,000**. This reflects lower PST collections, and lower corporate/personal income tax.
- The net federal government loss was \$201,000. This reflects lower income and GST tax collections.

Model Results Scenario II: Closure of Tagwi Secondary School

The overall net negative results (from the perspective of the local communities) have been identified as:

- There would be net job loss of 22 Full Time Equivalent (FTE) jobs in North Stormont.
- Total **net spending decrease** within the region and locality was **\$9.1 million**. This is a very large economic hit for the local community to absorb.
- The **net municipal** government decrease was **\$57,000**. This reflects decreased property tax collections, and multipliers from indirect spending lost.
- The **net provincial** government decrease was **\$1.04 million**. This reflects lower PST collections, and lower corporate/personal income tax.
- The net federal government loss was \$1.06 million. This reflects lower income and GST tax collections.

Behind the Numbers 1:

A Case Study on Why School Closings can be Unjust.

- A single mother living in an Eastern Ontario township has a son, now in grade 12, in one of the high schools identified for closure.
- Her son is a bright student, with an IQ of 130+. He wishes to advance to university and take engineering. A professional engineer would reasonably be expected to have an income potential of at least \$100,000 annually, or more than \$3 million over his/her working life.
- However, he has special needs. He is on the autism spectrum and this limits his ability to adapt to social conditions and change.
- Owing to his special needs, his mother had to take extra steps to prepare him for the transition from primary to high school, despite the new school being close by and the fact his friends were transitioning with him.
- Among other things, this involved her physically walking him outside around the school building for 2 years, to get him adapted to the concept of changing locations.
- She also had to completely sacrifice her personal media-related career, and rely on family members for transport and living. But she got him through.
- How much realistic hope can there be that future children with special needs, but still smart enough to get into university, will be able to transition, on short notice, from primary school to a high school with 1000+ students?
- Based solely on this example, Canada stands to lose millions of dollars in lost potential from school closures.

Behind the Numbers 2:

A Case Study on Why School Closings can be Unreasonable.

- A long-term immigrant to Canada, recently moved to an Eastern Ontario township, has invested much of his total capital in his convenience store and gas bar business.
- To raise the necessary funds, he had to sell his two other small businesses and his house in another part of Ontario.
- The total commitment amounts to close to \$1 million.
- He felt the investment in the facility was justified owing to having a good location next to a high school, with the prospect of regular trade throughout most of the year.
- Especially he invested on the basis that packaged meals, drinks and snacks would find a regular market, a good thing since these have better mark-ups than the relatively minimal margins gasoline sales provide.
- His store is currently frequented by students many times a day at breaks, lunch, and at extra-curricular activity times.
- The school is now slated for closure and he is at risk of losing his investment completely.
- Any businessman knows there are risks in investment, but this is unreasonable risk in light of a change being forced on him.

Conclusions – What are the Economic Consequences of School Closures on North Stormont?

- Using realistic assumptions, the economic loss to North Stormont from the prospective school closures is very large. The hit could range from \$1.6 million (based on the PAR recommendations to date) to as much as \$9.1 million if the local high school becomes vulnerable to closure due to falling enrollment.
- The largest component of any potential economic loss comes from the prospective closing of Tagwi Secondary School because of its strong links to the local economy. Its loss would be felt increasingly in the years to come as local businesses would find getting staff progressively more difficult and business investment and growth suffer as a result.
- In sum, the impact of the proposed school closings will be to exacerbate the "hollowing out effect" in this rural area.