

An Estimate of the Annual Tamworth Property Tax Revenue From Phase I of the CMI Race Track Project

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If the CMI race track is built in the Town of Tamworth, an important issue is how much additional property tax revenue the town would collect annually as a result of the project. One source has estimated that the annual tax yield from Phase I would be several hundred thousand dollars per year. This estimate seems unduly optimistic for several reasons.

The first reason is that only a portion of the project development costs would be assessed as taxable property value. Land acquisition and construction costs would certainly be included in the market value of the CMI property, for example. So probably would the engineering and site survey costs associated with development of the race track. However, travel and administration expense, market & promotion expenses, legal fees and investment banking fees are not capital improvements to the land and hence should not be included in the market value of a property. After excluding these expenses from CMI's projected costs for Phase I, one gets a land value of \$625,000 and a capital improvement value of \$3,545,000 – a total market value of \$4,170,000.

Another reason that one should expect a more modest tax payment by CMI is that properties in Tamworth are actually assessed at 71.7 percent of market value. If this assessment ratio is used for Phase I of the CMI project, then the assessed value will be \$2,990,000.

Applying Tamworth's local tax rate of \$25.50 per thousand dollars of assessed value to this estimate, one gets an estimated annual tax payment of \$76,245 – not several hundred thousand dollars. Unless CMI can convince the town assessor to include marketing and legal fees in the assessed value figure and unless CMI volunteers to have its property assessed at 100 percent of market value, it is difficult to see how its Phase I race track would yield an annual tax payment to the Town of Tamworth over a hundred thousand dollars.

Estimates of the Land Use Change Tax Resulting from the CMI Race Track Project

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Club Motorsports Inc. (CMI) has claimed that development of 60.9 acres presently enrolled in the current-use assessment program will yield \$200,000 in land-use change tax (LUCT) revenue. That claim seems to be high by more than a factor of ten: Analysis of relevant data suggests that the actual LUCT revenue resulting from the CMI development would be less than \$20,000.

One estimate simply takes CMI's own financial projection that it will spend \$625,000 to acquire four parcels with a total area of 248.9 acres. This implies an average purchase price of \$2511 per acre. If one uses this average price to calculate the market value of two current-use parcels with a total area of 60.9 acres, one gets a market value of \$152,920 for those two lots. Since the LUCT rate is ten percent of market value, this approach results in a revenue estimate of \$15,292 -- not \$200,000.

Another estimate looks at the two parcels to be acquired by CMI that are not presently enrolled in current use. Those two parcels have an assessed value per acre of \$708.88 and \$1825. Because the Tamworth equalization ratio was 71.7 percent in 2002, one can estimate that the fair market value of those two non-current use properties is roughly \$988.68 and \$2545.33 per acre. If one uses the higher of those two values to estimate the total market value of the two current-use parcels, one arrives at a total of \$155,010. This estimate suggests a LUCT revenue of \$15,501 - not \$200,000.

After conducting this analysis of relevant data, I have to conclude that the CMI claim about the LUCT revenue associated with the race track development project is a gross exaggeration -- by a factor of ten or more.

Summary of Study on the Effect of Underground Storage Tanks on Residential Property Values

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- The relationship between underground storage tanks and house prices has been studied using sales prices in the Cleveland metropolitan area. Source: Robert A. Simons, William Bowen, and Arthur Sementelli, "The Effect of Underground Storage Tanks on Residential Property Values in Cuyahoga County, Ohio," *Journal of Real Estate Research*, Volume 14, Number ½, 1997.
- To test the relationship between underground tanks and house prices, the hedonic pricing model was used for all 1992 residential sales in Cuyahoga County, Ohio. The research looked at both leaking and non-leaking tanks and it was found that residential properties in proximity to a leaking tank showed a reduction in price of approximately 17%.
- The source for storage tank data was the State of Ohio Bureau of Underground Storage Tank Regulations (BUSTR). According to the information provided by BUSTR, in 1992 there were 83 residential housing sales close enough to underground storage tanks to be included in the study.
- Results from other studies generally support the idea that there is a negative correlation between proximity to underground storage tanks and residential sales values. As distance between these areas increase, the relationship is less visible. Homeowners also perceive a decrease of residential sales price as attributed to the nuisance factor of being close to such a site.
- The hedonic price model "allows for the following interpretation of this variable: a residential sale located within 300 feet of a registered tank's site, that is known to have leaked, could expect to sell for \$15,152 less, holding all else constant." This sales price reduction is approximately 17% of the average 1992 sales price of residential property in Cuyahoga County, Ohio.

Summary of Swedish Study of Impact of Road Noise on House Prices

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- A study was published in 2000 reporting on the impact of road noise on sales prices for single-family homes in a Stockholm suburb during 1986 – 1995. See Mats Wilhelmsson, “The Impact of Traffic Noise on the Values of Single-family Houses,” Journal of Environmental Planning and Management, Vol. 43, Number 6 (2000), 799-815.
- “[T]raffic noise has a very strong impact on house value, but it is especially the combination of noise and visual view of the road that is important.” (p. 800) If the racetrack can be both seen and heard, then its impact on property values could be substantial.
- “A road has both negative and positive effects on property value, negative effects in the form of noise and air pollution and positive effects in the form of increased accessibility.” (p. 804) The racetrack will not improve road access to the Tamworth area. Rather, it could add to traffic congestion in the region.
- “[The data] indicate that a 1% increase in noise level will reduce the price by 0.2% below 68 dBA and 0.3% above 68 dBA. An increase of 1 dBA will reduce the [average house] price by \$386 at 57 dBA and \$3,213 at 72 dBA...” (p. 809) Note: Swedish currency converted to US dollars.
- “In this sample, houses in noisy and quiet locations differ by 17 dBA of noise exposure. Thus, a house of \$125,321 would sell for \$83,548 if located where the noise is loud, which is equivalent to a total discount of 30% ... The expected price for a standardized property declines relatively slowly in the interval below 68 dBA. However, above 68 dBA the reduction is distinct.” (p. 810)
- “The noise effects on property value are considerable. The empirical analysis suggests an average noise discount of 0.6% of the house price per decibel or a total discount of 30% of the price for a house in a noisy location compared to a house in a quiet one.” (p. 812)
- This study supports a conclusion that the operation of a racetrack in Tamworth could have a major negative impact on house prices unless the project is designed to screen adjoining properties from both noise and also a view of the track.

Summary of survey of academic articles on undesirable facilities and their impact on residential property values

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- Professor Stephen Farber, Graduate School of Public and International Affairs, University of Pittsburgh wrote the survey. See his “Undesirable facilities and property values: a summary of empirical studies,” Ecological Economics, January 1998, 1 – 14.
- Farber summarizes 25 studies of the impact of undesirable facilities on house prices. These facilities include sanitary landfills, hazardous waste sites, electric power plants, and chemical plants. The list does not include a racetrack.
- “The studies summarized clearly show that some types of undesirable facilities or incidents reduce property value in their vicinity...These adverse effects diminished with distance from some facilities or events, resulting in increased property values as distance...increased.” Put simply, Farber finds that homes immediately next door to undesirable facilities suffer depressed market values.
- Farber’s most interesting point has to do with who gains and who loses from the siting of an undesirable facility. The landowner who sells to the developer or owner of the undesirable facility stands to gain. The owners of adjoining residential properties stand to lose. Those who gain jobs because of the facility are unlikely to be residents of the community in which it is located.
- Here are Farber’s words: “A typical argument for the location of hazardous facilities is economic development...It should be noted that even if there is a positive employment and income effect..., some localized neighborhoods in the proximity of the facility may experience...reduced property values. Employment effects, if they arise at all, are likely to be geographically broad...Therefore, ‘who gains and who loses’ from these facilities is an important question.”

Summary of Study on Visual Encumbrances and House Prices

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- The proposed racetrack in Tamworth would be sited on the side of Mt. Whittier and would be widely visible. This raises the question whether the racetrack could depress house prices in its vicinity – even if there were no noise generated by the operation of the track. A study of the impact of power lines in Montreal suggests that the answer could be yes.
- Source: Francois Des Rosiers, “Power Lines, Visual Encumbrance and House Values: A Microspatial Approach to Impact Measurement,” Journal of Real Estate Research, Vol. 23, No. 3 (2002), 275 – 301.
- “This research looks at the impact of high-voltage transmission lines (HVTL) on surrounding property values ... It is based on a sample of 507 single-family homes sold over the 1991 – 96 period in ... the Greater Montreal area” [275]
- “The findings leave little doubt as to the main conclusion of this study: the position of a property along a HVTL structure highly influences its marketability” [284]
- “In most market segments considered, the residential property that is both adjacent to a HVTL easement and facing a pylon ... experiences a significant drop in value due to the visual encumbrance. This drop ... averages 9.6% ... of mean house price in the global sample” [291]
- “[F]indings also suggest price drops of around 15% - 20% for upper-price properties.” [297]
- Admittedly a racetrack is not the same as a HVTL line. However, if the racetrack is built, then it is possible that the owners of home with views of the track will suffer a decline in the market value of their properties. This is especially likely if the homes are relatively expensive ones.