Changing the Paradigm:
Paradigm Transportation Solutions Limited’s Approach to Doing Business

By Gene Chartier, P.Eng., Stew Elkins, and Jim Mallett, P.Eng., PTOE
Paradigm Transportation Solutions Limited is a consulting practice offering services in the specialized fields of transportation planning and traffic engineering, primarily in the southern Ontario (Greater Toronto Area), Canada market. Paradigm’s business model has a unique structure in the transportation consultant industry, with all 15 staff working from home offices across the region, including staff currently working from New Zealand and the Netherlands on Canadian projects. (Paradigm staff and ITE member Peter Kelly, who is based in New Zealand, is featured on page 26.) The firm’s partners recently shared insight with ITE Journal about the dynamics of this arrangement and how it is helping them do business.

ITE Journal: How was Paradigm created, and why is your business concept so unique in the consulting engineering field?
Paradigm: Our founding partners, Phil Grubb and current President Jim Mallett, started Paradigm in 1998, at a time when corporate mergers and acquisitions were beginning to take shape in our industry. They sensed an opportunity to meet an underserved market of small to mid-sized assignments through a more cost-effective work-at-home business model. After years of working in larger consultancies, they were also looking to achieve an improved work-life balance. At the time, and even today, telework was not a common practice, especially in our industry where working remotely was almost unheard of.

ITEJ: How has your unique business model given you an advantage in a competitive market?
Paradigm: Paradigm recognizes that our clients are constantly faced with the challenge of achieving “more with less.” Constrained budgets and limited staff resources require new and more effective forms of consulting service. Paradigm has been structured to meet this need, with a work-at-home business concept that is unique in the consulting engineering field.

Working from home offices helps to reduce overhead costs. This enables Paradigm to charge more competitive hourly rates, thereby offering our clients quality consulting services at a more competitive price. By focusing on our core business, we can also guarantee that senior Paradigm staff will participate in virtually every aspect of project delivery, improving the quality of work and the soundness of recommendations. In addition, our model enables Paradigm to remain nimble in the ever changing business environment, as the final decision on matters rests solely with the firm’s three partners.

Paradigm’s Business Concept
“Paradigm’s corporate mission is to provide cost-effective, creative, innovative, technology based and environmentally responsible transportation solutions. Paradigm recognizes that our clients must meet the challenge of achieving “more with less.” Constrained budgets and staff resources require new and more effective forms of consulting service. Paradigm has been specifically created to meet this need, with a business concept that is unique in the consulting engineering field.”

Opposite: Paradigm hosts quarterly social events to bring staff together face-to-face, encouraging teamwork and collaboration. During the recent social event pictured, the staff enjoyed axe throwing.
ITEJ: How have you established initial team building and collaborative processes amongst the staff?

Paradigm: Paradigm staff has always worked from home offices. In the early years, the entire team lived in the same community, which allowed staff to meet at someone’s house or the local coffee shop as needed with relative ease. The founding members of the firm had also worked together prior to starting the business, and could rely upon those existing relationships. But as the company has grown and the staff complement has extended outside the same geographic area, we have relied extensively on technology to enable collaboration. Digital communication tools have helped to minimize the need for regular face-to-face interaction. We still get together to discuss projects, participate in training and staff events, and socialize, except the meetings take place at locations outside of a traditional office environment. This approach has worked well for the type of work we do, but would prove more challenging if our firm undertook more traditional engineering design and construction assignments for infrastructure and facility projects.

ITEJ: Describe the culture of your firm and how you work to maintain it with remote staff.

Paradigm: Paradigm’s culture is one of collaboration, cooperation, and camaraderie, albeit we work from different locations. We make a concerted effort to foster a positive, supportive work environment and nurture our culture through a variety of initiatives. For example, the firm hosts quarterly social events, organized by staff at a venue of their choice. Most, if not all staff, attend every function because they don’t see their colleagues on a daily basis. These events enable us to recognize and celebrate our successes, and help encourage teamwork and collaboration, not to mention offer the opportunity for staff to catch-up with their co-workers in person. We also actively encourage our staff to participate in ITE and other organizations to remain current, network with peers and colleagues, and give back to the profession.

ITEJ: What challenges have you encountered as a result of your business concept that most firms would not face?

Paradigm: Our greatest challenge has been convincing people that our model is a legitimate business concept. When you tell people you work at home, the usual response engenders some reference to pajamas, bathrobes, and fuzzy slippers, and a bunch of guys working in their basements. Some view Paradigm as being “small” despite the fact that the firm employs 12 full-time transportation professionals, which exceeds the local staff complement of several of our competitors. They question whether Paradigm has sufficient resources to complete larger projects because we don’t maintain a “bricks and mortar” presence. There also remains skepticism in the industry that Paradigm’s business model can be sustainable in the long term.

Communication is always a challenge, regardless of how the firm conducts business. The absence of daily in-person contact requires greater reliance on the internet and electronic communication to keep in touch, but not anymore than in companies with staff distributed across the continent in different offices. The size and structure of our team actually forces us to communicate more frequently and productively than more traditional firms, because such contact is imperative to the operation and success of our business model.

ITEJ: What recommendations or lessons learned would you share with other consultants looking to try a similar business model?

Paradigm: This model is not for everyone. Working at home requires discipline (oh, the distractions!) and the ability to work independently and without in-person interaction for periods of time. If considering this model, we would recommend:

- Start small and grow organically, and strategically. You need to have complete confidence in your staff and your ability to deliver. The assignments will also likely be smaller because clients may be reluctant to offer larger projects out of concern for your resource availability.
- Find good partners who offer complementary services. There are other small, like-minded firms out there who can supplement your service offerings or perform specified tasks to assist. You may also be able to offer your specialized services to a larger firm. Support for home-based businesses is much better today with the growth of this model.
- Deliver what you promise. Don’t bite off more than you can chew. Be honest what you can achieve given your resources. This will set your firm up for success.

ITEJ: What advice do you have for professionals seeking remote work opportunities in offices or agencies where the culture has not permitted that flexibility?

Paradigm: Build a business case to demonstrate the benefits of reduced commuting to your employer, such as more time spent working, reduced parking and office space requirements, and support for environmental and sustainability objectives. Ultimately, you may need to “go it on your own” if the support is not provided. Look for other like-minded individuals, as they often exist.
Paradigm’s Partners

James (Jim) Mallett P.Eng., PTOE is president of Paradigm Transportation Solutions Limited. His 25 years of professional practice provides Paradigm with a wealth of technology-based transportation planning experience. Jim is the transportation modeling specialist for Paradigm. He has designed, developed, and refined numerous travel forecasting models and applied them to assist in preparing long range master plans, environmental assessment studies and large scale community or secondary area plans for a number of major communities in Canada. In addition, he has extensive traffic operations experience and carries a Professional Traffic Operations Engineer designation of which there are about 125 practicing professionals in Canada. Jim is also well-versed in the area of traffic calming having developed a number of neighborhood traffic calming plans.

Jim is responsible for the delivery of consulting services to our public and private sector clients. He provides land development transportation and traffic support services. In addition, he is the leader of our development team creating transportation technology applications. His professional experience includes: environmental assessments, transportation planning and modelling, design and management of travel surveys, traffic operations and traffic management, parking demand operations and management, neighborhood traffic calming studies, and public participation programs. He has been responsible for the design and development of a number of city-wide transportation planning models and several sub-area models in major urban centers. He has developed many innovative technology-based concepts that have made each of these a success from data collection through to model development and calibration. He has also planned numerous area traffic calming studies.

Jim has a bachelor and a master of applied science in civil engineering (transportation) from the University of Waterloo. He is a member of ITE. He can be reached at jmallett@ptsl.com.

Eugene (Gene) G. Chartier, P.Eng. is vice president of Paradigm Transportation Solutions Limited. He has held progressively responsible positions in the municipal government sector and private consulting, almost all involving transportation engineering in some form.

Gene has more than 22 years of experience in civil engineering, transportation and urban planning. During his career, he has successfully completed major and complex planning studies, including official plan, secondary plan, and development charge by-law reviews, transportation and infrastructure master plans, class environmental assessments, and integrated land use, urban design and transportation corridor plans. Gene also has experience in conducting traffic operations and safety reviews involving urban and rural roads.

He has specific expertise in active transportation, traffic calming, transportation demand management, roundabouts, travel demand forecasting, parking, and demographics.

With more than 25 years of active participation in ITE and service as an elected or appointed member at the student chapter, section, district, and international levels, Gene brings knowledge, experience, and enthusiasm to his role as Canadian District Director on the ITE International Board of Direction and the Canadian Institute of Transportation Engineers (CITE) Executive Committee and Board. Gene is a graduate of the University of Waterloo in Ontario, Canada, with bachelor's and master's in civil engineering. He is a Fellow of ITE. Gene can be reached at gchartier@ptsl.com. Also see more information about Gene on page 11 of the 2016 International Board Of Direction introduction in this issue.

Stewart K. Elkins is vice president of Paradigm Transportation Solutions Limited. He has corporate responsibility for the delivery of consulting services to the firm’s public and private sector clients. Stewart has more than 22 years of progressive transportation planning and traffic engineering experience in both the public and private sectors. He has managed a variety of multimodal projects throughout Ontario, Canada including transportation master plans, municipal class EA’s, truck route studies, transportation policies, neighborhood traffic management studies, parking studies, and traffic impact studies. He is an active member of the Canadian Institute of Transportation Engineers and was Past President of the Southwestern Ontario Section.

Stewart has completed the need and justification and the public consultation component of more than 30 studies following the Class Environmental Assessment Process. As part of these studies he has developed many innovative public consultation programs for clients using a variety of techniques to engage the public and solicit important feedback. Stewart also has substantial expertise with respect to access design, circulation systems, and parking design for all types of residential, commercial, industrial, institutional, and recreational land uses. He has reviewed more than 1,500 site plans throughout his career and has developed transportation policy and design guidelines for use by public sector clients. In 2002, Stewart worked with the World Youth Day Organization and the City of Toronto where he managed the development, implementation, and mobilization of three comprehensive parking plans for pilgrims and delegates including those with special needs. Stewart has considerable experience in undertaking and peer reviewing transportation impact studies for commercial/retail, residential, institutional, recreational, and industrial land uses.

Stewart holds a bachelor of environmental studies (Hons) from the University of Waterloo. He is a member of ITE. He can be reached at selkins@ptsl.com.