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Feature – Introduction to Special Issue

Occupational health and safety and the mobile workforce: insights from a Canadian research program

Barbara Neis and Katherine Lippel

Abstract

Globally, employment-related geographical mobility (mobility to and within work) is a pervasive aspect of work that has potential health and safety implications. As an introduction to this special issue this article defines the mobile workforce as those who engage in complex/extended mobility to and within work encompassing > 2 hours daily, less frequent but more extended mobility between regions and countries, and mobility within work such as between work sites or in mobile workplaces. Focusing on the Canadian context, we discuss the challenges associated with developing a statistical profile for this diversely mobile workforce and provide an overview of articles in the special issue identifying key health and safety challenges associated with extended/complex employment-related geographical mobility. We estimate that up to 16 percent of Canada's employed labor force (including those commuting > 1 hour one-way, temporary residents with work permits, and transportation workers) engage in extended/complex mobility related to work.

Key words: employment-related geographical mobility, Canada, health and safety, workers' compensation, migrant workers

Introduction

Since the beginning of the industrial era, workers have journeyed to work using diverse modes of transportation. These journeys have encompassed multiple spatial and temporal scales extending from daily to international mobility for work. Similarly, some types of work have always been associated with mobility within work as, for example, in the transportation sector. Over the past few decades, however, deregulation, the internationalization and externalization of production and services, changes in transportation, urbanization, and the promotion of labor market and work scheduling flexibility and related increases in precarious employment, have contributed to the complexity and diversity of internal and international employment-related geographical mobility (E-RGM) in many parts of the world.¹⁻⁴ There are growing literatures on mobility and on the changing world of work but until recently, there has been limited research linking these two phenomena and exploring their diverse combined impacts including on health and safety.⁴ This special issue of *New Solutions* brings together a set of articles developed as part of a large program of research called the On the Move Partnership (www.onthemovepartnership.ca) focused on documenting and assessing the impacts of extended/complex mobility to and within work for working people, including on their health and safety.

Over the past eight years, On the Move researchers and partners have been exploring E-RGM in the Canadian context. Here, we apply the definition of E-RGM as articulated by Roseman and colleagues:

Employment-related geographical mobility entails mobility to and from one's job, and as part of one's job. Employment-related geographical mobility ranges across a spectrum from relative immobility (work at home); through extended, daily travel to and from work and within jobs; to regular, more extended absences from home at regional, national, and international scales. This spectrum therefore takes

into account not only transnational mobility to and as part of employment, but also similar movement (and lack thereof) between localities, regions, and provinces and states, as well as across other subnational borders. We use the adjective “geographical” to distinguish this form of mobility from the alternative meaning of “mobility” in the social sciences, where it is associated with “upward” or “downward” social and economic movement along the kinds of scales (such as class and education) that are used by some theorists.^{3(pp175-176)}

On the Move researchers have focused on extended/complex E-RGM across the spectrum from extended daily mobility (> 2 hours daily) to, and in some cases, within work (as in transportation, trucking, fishing, homecare and some cleaning work), to less frequent employment-related mobility to regions, provinces, and countries different from places of residence (as in fly-in/fly-out, drive-in/drive-out work, and various types of international labor migration into and out of Canada for work). Some of this mobile labour force can be categorized as doubly mobile in that they engage in extended/complex mobility to work in mobile workplaces or, as with home care workers, can be employed in multiple workplaces so that their E-RGM includes both travel to work and commuting between workplaces. We have examined these different types of mobility in urban and rural contexts, across multiple sectors and provinces.

The overall program of On the Move Partnership included statistical research as well as extensive field and policy research on regulatory frameworks. Two key areas of focus for our research were occupational health and safety (OHS) and workers' compensation policy as applied to the mobile workforce. As identified in parts of the research program, challenges for effective implementation of protections in Canada for differently-mobile groups of workers, and proposed strategies to address these problems, are the main focus of this special issue. Related overarching themes are, on the one hand, the application of OHS legislation and related employment standards to the mobile workforce and, on the other hand, the application of workers' compensation provisions to determine whether the

promise of flexibility in the application of these regimes does indeed deliver adequate protection to the various segments of the mobile workforce. In the remainder of this introduction, we provide: a statistical profile of the scale and diversity of the segments of the Canadian labor force where extended/complex E-RGM tends to be concentrated (including international migrants who come to Canada and work); place the special issue in the context of the larger literature on labor mobility and OHS/workers' compensation; and, provide an overview of the issues, and themes addressed in the contributions.

The spectrum of extended/complex E-RGM in Canada

The spectrum of extended/complex E-RGM from daily mobility through more extended travel and absence from home for work among internally and internationally mobile workers in Canada includes a broad range of factual situations. There are people who engage in extended and often multi-modal daily commutes to work, particularly if they travel by public transit and work in large metropolitan areas like Toronto and Vancouver.⁵⁻⁷ There are others who come from all over Canada, and potentially from outside of Canada, to go to a remote workplace, such as a mine in Northern Ontario, an oil and gas development in Alberta or Saskatchewan,⁴ or in transient treeplanting locations. Many Canadians and some international migrant workers work in mobile workplaces such as those in trucking, fishing, shipping, or the airline sector. Others come from local regions, different parts of Canada, or internationally to work in the service sector including in a hotel or outfitting lodge in rural areas or in major tourism centers like Banff in Alberta,⁸ as health care and live-in caregivers,^{9,10} or as high or low-skilled workers in occupations in such sectors as construction, agriculture, seafood, and meat processing in urban and rural areas.¹¹ The challenges to effective OHS protections and for fair access to workers' compensation differ according to the specific situation.

The mobile workforce is also multi-faceted in relation to time. Extended and complex daily mobilities can cover relatively short distances but consume several hours a day. Such is the case with some precariously employed immigrant workers in cleaning and other temp agency work in Toronto,

and homecare workers in different contexts.^{6,7} There are mobility situations that require varying amounts of time spent away from home ranging from days, through weeks, and even years. There are long-term employment relationships that require mobility, but also short-term employment relationships. Some temporary foreign workers (TFWs) have been returning to Canada, perhaps to the same employer, for decades and can remain in Canada, separated from their families for seasons and even several years. Construction workers, on the other hand, often travel to shifting, relatively short term work locations that can require extended daily commutes or extended rotations of several weeks at a time. Fly-in/fly-out arrangements can involve a stable workforce governed by a collective agreement or workers placed by temporary employment agencies, or other intermediaries, for short-term work. Some mobile workers are self-employed while others are employees. Some are precariously employed, others have job security and union protection. The parameters of the specific situations have particularly important implications in the policy context, given the potential for "layers of vulnerability" as defined by Sargeant and Tucker.¹²

Extended/complex E-RGM in Canada: a statistical profile

There is no single data source in Canada that fully and clearly captures the number of people in the labor force engaged in the diverse types of extended/complex E-RGM that are the focus of the On the Move Partnership and of this special issue. Data from the 2016 Canadian Census and from Immigration, Refugees and Citizenship Canada (IRCC) for international temporary residents with work permits are synthesized in Table 1, providing a rough estimate of the proportion of Canada's employed labor force engaged in extended/complex mobility for work during that year. Data on the employed labor force, long commutes, inter-provincial employment, and transportation workers come from the 2016 Census. Data on numbers of different types of temporary residents with work permits including entrants through the Temporary Foreign Worker Program (TFWP) and International Mobility Program come from IRCC.

Table 1: Estimated proportion of Canadian employed labor force engaged in extended/complex work-related mobility, 2016		
Employed labor force (ELF)¹⁴	17,230,035	
Commuting, total¹⁵	15,878,940	
Type of commute / worker	Number	% of employed LF
Total extended/complex work-related mobility	2,837,745	16.46%
Long commutes (> 1 hour one-way) ¹⁵	1,494,830	8.68%
Inter-provincial commutes ¹⁵	158,000	0.92%
Transportation workers ¹⁵	818,110	4.75%
Temporary residents with work permits ¹⁶⁻¹⁸	366,785	2.1%
<i>Temporary Foreign Worker Program</i> * ¹⁷	78,455	
<i>International Mobility Program</i> ** ¹⁸	288,330	
*Given seasonal workers generally leave by December 31st, we used year in which permits were valid.		
**Given work permits may be greater than one year, we used December 31st count.		

The data in these sources has recognized limits. Some individuals would be captured in more than one category and would be counted twice in our estimates, but 2016 Census data in particular likely under-estimates numbers engaged in extended/complex mobility for work as defined in this special issue. For instance, some transportation workers will be included in the “long commute” category if they commute an hour or more to work, one way. Long commute estimates do not include, however, mobility within work which is a feature of all transportation work and is associated with similar hazards and work-life challenges as extended commutes. Similarly, those who work in multiple locations, such as homecare workers, some cleaners, and travelling sales representatives, may travel relatively short (but often changing) distances *to* work and, in addition, commute *between* workplaces with the combined travel taking up a large part of their day. They would likely not be classified as engaged in long commutes in the Census.^{7,19} Because of their mobility *within* work, these workers may confront similar hazards and likely make similar investments (time and costs) in mobility as other extended/complex mobility groups.⁷ Additionally, the Census captures only commutes to work and does not capture intermittent but potentially quite frequent E-RGM that can be part of work (such as business trips).

In terms of the inter-provincial worker data in Table 1, many but not all Canadian inter-provincial employees engage in extended mobility for work. Some live close to provincial boundaries and their work, although in another province, would be nearby, thus some of these workers would not engage in extended/complex E-RGM and some of those who do have long commutes would be captured in the long commute category. However, census data seriously under-estimate the number and proportion of inter-provincial employees in Canada's employed labour force. Data from Statistics Canada's Canadian Employer-Employee Dynamics Database (CEEDD) which links multiple databases including taxfiler data,²⁰ can provide a better grasp of the scope and volatility of inter-provincial employment in Canada, but these data are not easily accessed and not yet available for 2016. Using the CEEDD, Statistics Canada estimates of the employed inter-provincial labor force were closer to 2.5 to 3 percent between 2002 and 2011 but fluctuated in response to the impacts of the global recession in 2008 including on prices for key commodities like oil, production of which is a key driver for long distance labor commuting in Canada.²¹ One reason the Census underestimates inter-provincial employment is because questions speak only to employment at the time of the census. As a result, the often seasonally employed mobile workers who engage in fly-in/fly-out, drive-in/drive-out long distance labor commuting to other provinces, and those who work seasonally in other provinces in the tourism and other sectors would be under-counted. Similarly, seasonal workers who engage in long commutes to work on a rotational basis within large provinces like Quebec, Ontario, Alberta, British Columbia, and Newfoundland and Labrador are likely poorly captured in the long commute data category from the Census.

Table 1 also includes data on two types of temporary residents with work permits in Canada. TFWs have been included in the Census since 1991. However, it is not clear this population is well captured. Furthermore, Census data on commute times and distances for those international migrants with work permits would relate to travel from their place of residence *in* Canada to work *in* Canada (as opposed to travel from their country of origin) and would thus seriously under-estimate the proportion of these

international migrants who have engaged in complex/extended mobility to Canada for work thus making them part of the Canadian mobile labour force.

Taking into account both problems with double counting and under-estimation from available Canadian data, the statistical profile of extended/complex E-RGM in Table 1 suggests it is a significant aspect of the working lives of up to 16 percent of people in Canada's employed labor force. What are some of the characteristics of the mobile labor force based on these sources? Extended/complex daily commutes were particularly common in major urban centers in Canada and long commutes (defined by Statistics Canada as on average >sixty minutes each way) are increasingly common across the employed labor force as a whole. More men than women engage in the long commutes, particularly long distance² but given research done elsewhere on journey-to-work among men and women, it is possible the length and duration of women's commutes is under-estimated if it does not include their often more frequent integration of daycare, shopping, and other mobility into their E-RGM.^{7,22,23} Long distance labor commuting happens in both urban and rural areas but its relative importance to regional economies is particularly significant in rural areas including high unemployment areas of Canada like the province of Newfoundland and Labrador.²⁰ Table 1 shows that in 2016, the number of Canadian commuters for work with 'long commutes' of more than sixty minutes on average commuting to work reached almost 1.5 million, 8.7 percent of the employed labor force.²⁴ A majority (57 percent) of these spent that time in a car, truck, or van, either as driver (673,000) or as passenger (181,000). The average one-way commuting time for these long commutes was seventy-four minutes and was essentially unchanged from 2011; nine percent spent more than two hours (120+ minutes) on each one-way daily commute.²⁴ Only 12 percent of all commuters used Canadian public transit systems to get to work but among these commuters, about 40 percent (representing 595,000 people) had a long commuting time, spending at least sixty minutes on a bus, subway, train, commuter rail, or ferry every day to get to work.²⁵ Since public transit commutes are generally multi-modal (walk or car and sometimes more than one mode of public transit), these data may underestimate average commute time for those using public

transit and others who engage in multi-modal commutes such as fly in/fly out workers who drive to an airport to catch a flight and then are transported by bus, taxi, or other means to their work site, or drive in/drive out workers who drive to a rendezvous point and are picked up there for further transit to the worksite.²⁶

Based on the Census, those who report having ‘no fixed workplace’ are more likely to engage in long commutes than those who travel to a regular place of work. The proportion of Canadians with ‘no fixed workplace’ is growing. Those with no fixed workplace location in 2016 were concentrated in particular sectors including: construction (31.2 percent), administrative and support, waste management, and remediation services (10.8 percent), and in transportation and warehousing (10.7 percent).²⁷ For all employees, average commute times can mask substantial daily, seasonal and other types of variability. Furthermore, average commute times can understate the challenges associated with long commutes because the possibility of longer than average commutes needs to be accommodated in daily lives including, for example, when arranging daycare.^{5,7}

Some inter-provincial employees particularly those in resource extraction (oil and gas, mining, forestry), construction, and seasonal agriculture and food processing (for instance, seafood processing),²⁸ tourism, health care (including home care),¹³ and transportation (e.g. shipping, trucking) often travel long distances to work in other provinces, using multi-modal transportation (car/truck/ferry/plane), and can be away from home for weeks or even months at a time. These patterns are particularly common among those living in lower income/higher unemployment regions such as Atlantic Canada.

Based on IRCC data, temporary residents with work permits comprised an estimated 2.1 percent of the employed Canadian labour force in 2016 (Table 1). They enter Canada through various programs including as high and low-skilled TFWs, seasonal agricultural workers, live-in caregivers, as well as under the international mobility program. As noted by Cedillo et al.,¹¹ Canada’s TFWP population increased eight-fold from 1995 to 2017. These data do not include the numbers of international

migrants who come to Canada as international students, a group that has grown substantially in recent years, many of whom would be of working age (postsecondary students) and would have a work permit. In some cases, they may be coming in through the international student program only because this is considered to be their best option for gaining access to employment and ultimately immigration status.^{29,30} All of these internationally mobile workers engage in complex/extended E-RGM to get to Canada but may, because of their status as students and TFWs, with the latter often tied to a particular employer and thus not likely to engage in extended travel within Canada, not be picked up in Statistics Canada's long commute category.

Finally, the 2016 Census asks only about journey to work and not mobility within work which is characteristic of the very large transportation sector. Some of these workers engage in daily commutes to work, sometimes to a transient workplace or port of departure, and are then mobile while working.³¹ In some cases, the distances they journey from home can be relatively short, allowing them to return home at the end of a working day. In other cases, such as long haul trucking, seafaring, the airline sector, and some fishing, they can be mobile for several days, weeks, and in some cases (such as seafaring) for months at a time. As indicated in Table 1, there were 818,110 transportation workers in Canada (4.7 percent of the employed labour force) in 2016.

Taking these diverse mobilities and groups (long commuters, inter-provincial employees, international migrants, transportation workers, and others) into account, and acknowledging the shortcomings with existing statistical sources including both likely double-counting and under-estimates, it is reasonable to estimate that up to 16 percent of the Canadian employed labor force engages in complex/extended mobility related to work. Furthermore, the proportion is likely increasing in Canada, is concentrated in urban areas, but is also important for many rural areas of the country including particularly Atlantic Canada. Patterns of extended/complex E-RGM vary across sectors and are associated with large-scale economic fluctuations and with policy shifts including particularly policies related to immigration, (TFW, IMP, and foreign student programs), technological changes and

changes in the organization of production (such as just-in-time delivery), and often developments in state-subsidized resource development and major construction initiatives.

Overview of the special issue

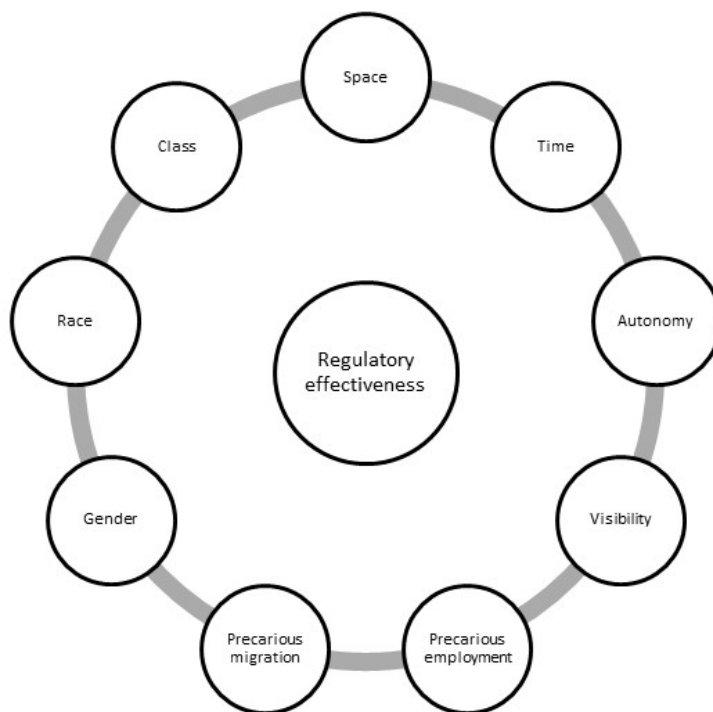
The special issue opens with a synthesis of the On the Move findings related to OHS and workers' compensation by Lippel and Walters.³² As indicated in that overview, while considering the spectrum of complex/extended mobility in our research and reflecting on OHS and workers' compensation policy, it became clear that policy challenges apply distinctly depending on the specific categories of mobility examined. For example, internal Canadian inter-provincial "migrants" don't necessarily have an employer when they travel to another province for work, a reality that determines specific challenges, obligations, and solutions. For a further example, those who have short term commutes to get to and from work, or who travel between clients during the course of the day, may not face the same work-family challenges attributable to their mobility as those faced by long-term commuters and TFWs but they may face other challenges including allocating a greater share of their working lives and incomes to commuting since they do it on a daily basis.

Lippel and Walters organize their findings on OHS by distinguishing between hazards and challenges associated with getting to work, working, living at work, and living at home for diverse groups of differently mobile workers. A key high-level finding is that certain characteristics of mobility present particular challenges for regulatory effectiveness. Figure 1 provides an overview of determinants of regulatory effectiveness in OHS-WC. For the mobile workforce key determinants include the visibility and invisibility of different categories. In Canada, while TFWs are highly visible to the federal immigration regulator, they are less so for the provincial OHS and workers' compensation authorities who have had, until recently, no mechanism to detect where international migrants were working within the province - a situation that mirrors the reality in many European countries.³³ The invisibility is even more pronounced when we consider internally mobile workers who do not require any form of permit to travel between provinces for work. Nor is there any regulatory

attention paid to workers, often highly precarious, who undertake a long daily commute.⁶ Also of importance is the issue of cultural isolation as certain types of mobility may impact the social cohesion of workplaces and surrounding communities, the sense of belonging to the workplace collective, and access to social support from families and others in their neighborhood/community of residence. The isolation of certain categories of mobile workers can serve as an impediment and deterrent to unionization and can create challenges for managing work-related stress, injury, illness, and return to work. These will, in turn, weaken mobile workers' ability to exercise their rights including those related to OHS, accessing compensation, and return to work.¹¹

Figure 1. The determinants of OHS-WC regulatory effectiveness

Determinants of regulatory effectiveness in OHS-WC



Lippel and Walters find there are significant disparities within the mobile workforce as to power relations and autonomy. The impact of mobility will be quite different for those who have greater autonomy and control over their working conditions as compared to workers who have little say on when and where they must work, and how the job must be done. Professional hockey players are technically mobile workers, as are many scientific, health, educational, and management professionals, but they generally have access to more mobility-related supports, job security, and better incomes to help offset the costs, stresses, and strains of extended/complex E-RGM. There are also sectoral differences of importance: challenges and solutions specific to OHS protection of miners, seafarers, or truckers will be very different from those relevant to tree planters or agricultural workers. Finally, there are important differences within sectors including, for example, between red seal, unionized construction trades workers and laborers, between genders, younger and older workers, and between internally and internationally mobile workers. Further distinctions in layers and degree of vulnerability¹² will apply to undocumented international workers, more vulnerable as compared to TFW visa holders, who in turn are more vulnerable than the local workforce with regard to many issues, a phenomenon that has been broadly documented in Canada³⁴ and internationally.³⁵ Even when labor rights clearly exist, the specificities of the conditions of work in relation to international migration status are known to affect the ability of workers to mobilize regulatory protections.³⁶⁻⁴⁰

Thus, as can be seen in the other articles in the special issue which focus on particular groups and contexts, OHS regulatory challenges vary and can be complex depending on the nature of employment, on time and distance considerations, as well as on the worker's status and particular circumstances (gender and related vulnerabilities, language proficiency, nature of migration) which can increase their vulnerability. As Lippel and Walters show,³² challenges for effective application of workers' compensation legislation also exist, although their sources are different.

The second article in the special issue by Gesualdi-Fecteau et al.²⁶ picks up the theme of vulnerabilities linked to the journey to and from work identified by Lippel and Walters. In this article,

starting from evidence of increasing duration, complexity, and diversity of E-RGM, these three legal scholars ask whether and when travel time is considered work time in Canada. As noted by the authors,

[f]rom a labor law perspective, determining whether and when time spent travelling by workers counts as work time will have repercussions for workers' remuneration and related benefits, such as the possibility to resort to legal provisions limiting the duration of work, and overtime and vacation pay calculations. It will also influence protections found in health and safety law and the ability of injured and ill workers and their families to access workers' compensation benefits for travel-related injuries and illnesses.²⁶

They begin by conceptualizing some of the diverse employment-related travel schemes associated with different types of work and situations in Canada and then present and analyze the nature and scope of labor law protections related to travel time based on employment standards law across four Canadian provinces. Reading across case law they point to a few overarching principles associated with decisions including the degree of control exercised by employers over travel time. Gesualdi-Fecteau et al.¹⁹ note that despite the vulnerabilities for workers associated with excluding most travel time from work time, many workers might not want employer control to be extended to this part of their working lives.

Shan and Lippel's³¹ contribution presents findings from a study of mobility-related OHS issues among seafarers employed on the St. Lawrence Seaway and Great Lakes, including those related to the journey to work and mobility within work. Great Lakes seafarers journey varying distances from home to often changing ports of departure and, once at work onboard their vessels, frequently engage in inter-provincial mobility and sometimes cross the international boundary between Canada and the United States. These diverse mobilities to and within work expose seafarers to various OHS hazards.

Furthermore, these mobilities and the regulatory framework for OHS in the fleet can constrain seafarers' access to regulatory protections. Based on legal analysis and key informant interviews done almost exclusively with men, study findings show that few legal instruments are available to protect seafarers from commuting-related occupational hazards and that OHS challenges while at work are

numerous, particularly when we consider that ships are a type of “total institution.” As Shan and Lippel say “one of the totalistic features of ships is that work, rest, and entertainment are all under a single authority on board” which has implications for worker voice.⁴¹

Three of the six articles in the special issue focus on international migrant or TFWs in Canada. Hill et al.⁹ document OHS (im)mobilities-related challenges experienced by primarily female domestic workers employed in a rural and remote small city (Fort McMurray), the population of which serves the large oil and gas development and extraction activities of the Municipality of Wood Buffalo in Northern Alberta. These live-in caregivers generally come from the Philippines and their employers are well-paid oil and gas workers. They care for the latter’s children and homes while their employers commute to work on site on a 24/7 basis. These caregivers are among the 67 million domestic workers globally whose work is integral to supporting the working lives of others but whose OHS-related issues are under-studied, particularly in Canada. A key focus of the article is the relationship between multiple-level factors and their vulnerability to hazards. These factors include meta-level transnational migration and state policy, meso- or regional-level policies and practices related to the oil-sands economy of Alberta, and micro-level (im)mobilities in terms of the households and communities where these caregivers work. Hill et al.⁹ also explore the relationship between (im)mobilities and the effects of an OHS system that makes their presence, work, and the hazards caregivers face largely invisible to regulators and constrains their recourse in addressing them. The authors draw on results from a mixed methods study (survey and interviews) and conclude with a series of policy suggestions designed to help address the problems they identify.

Cedillo et al.¹¹ present OHS-related findings in a dataset from a larger individual and group interview-based study carried out among TFWs working in low- and high-skilled occupations who had or were transitioning to permanent residence in Canada at the time of the original study (2014-2015). In the past, access to permanent residence was largely limited to workers in high-skilled occupations but this has changed in some provinces through the introduction of Provincial Nominee programs. The

effects of this transition were the main impetus for the original study. There were 99 interviewees in the original study (forty-eight workers and fifty-one others). From these, transcripts from twenty-two workers and relevant insights from others that included data related to working conditions and OHS were retained for this study. The workers had worked or were working in meat processing, hotels, food service, or construction in Canada. Cedillo et al.¹¹ document a range of concerns including serious OHS issues, the ways precarious migration status affects the ability of these workers to exercise their rights (voice), and mechanisms that undermine regulatory effectiveness. They also document the associated sources of vulnerability, including closed work permits, which make TFWs dependent on a single employer as well as the invisibility of TFWs to OHS and employment standards regulators. The authors recommend changes to related programs including improving migration security and promoting communications between provincial OHS and federal immigration departments.

The special issue concludes with an article by Dana Howse⁴² based on an interview with Jared Matsunaga-Turnbull, Executive Director of the Alberta Workers' Health Centre. The article focuses on Matsunaga-Turnbull's observations and reflections on a peer-to-peer OHS education project entitled the New Alberta Workers (NAW) program. That program was established with funds from a creative sentencing fine resulting from the prosecution of a company operating in Alberta in the wake of the death of two, and serious injury of two other international, migrant Chinese workers brought into Canada through the TFW worker program in 2007. Its main focus was designing and delivering an OHS program to "new Alberta workers" including primarily immigrant and migrant worker populations in the province. The lessons from the three-year project are similar to those found in both the Hill et al.⁹ article and the article by Cedillo et al.¹¹ in terms of what they tell us about the hazards and vulnerabilities confronting these workers. Jared Matsunaga-Turnbull also reflects on what was learned from this large, effective approach to OHS training about both existing barriers to training and future training opportunities.⁴² As noted by Howse in the introduction to the interview, "the NAW program revealed the need for more on-the-ground comprehensive services that address in a holistic

way the array of interconnected concerns and challenges confronted by new to Alberta workers, related to workplace rights, health and safety, housing, residency, family, healthcare, and so on.”⁴² [typesetter add page #] As suggested by Matsunaga-Turnbull, when discussing the strengths and weaknesses of the NAW program, which had only temporary funding, “you can’t solve precarity with precarity.”⁴²

Conclusion

This special issue documents OHS and workers’ compensation challenges associated with mobile workers across the spectrum from extended daily commutes to international temporary migration into Canada. Several of the articles here focus on extended mobility for work in the resource and transportation sectors including shipping, and among international migrant workers employed in high and low skilled and live-in caregiver programs. Other On the Move research not included here has focused on the OHS and other issues associated with mobility among precariously employed immigrant workers in Toronto,⁶ seasonally employed migrant inter-provincial and international seafood processing workers in Atlantic Canada,^{7,28,43} among differently mobile health care workers in Nova Scotia on Canada’s east coast,^{10,44,45} and tourism workers in Banff, Alberta.⁸

A core message from this work is that protecting the health and safety and dignity of workers requires attention to not only conditions at work, but also at home and on the road, as well as to how these intersect to affect risk, recognition and compensation. Some On the Move researchers have argued for the existence of work-related ‘mobility regimes’ which encompass such things as immigration and health and safety and compensation laws, hiring practices, work scheduling and mobility options, costs and time investments, and the discourses associated with differently mobile groups. Documenting these regimes and how their manipulation is a key aspect of power dynamics related to work can help make visible the role of mobility and its relationship to layers of vulnerability including to injury, illness and constrained access to compensation.^{4,36} A key implication of this work is that campaigns and policies for social justice, including as this relates to worker health, need to consciously attend to E-RGM and to those mobility regimes.

A number of more specific cross-cutting themes emerge from the On the Move program of research. These themes include the challenges associated with tracking extent and distribution of extended/complex E-RGM across groups and regions, but also and importantly from a health and safety perspective, the internal dynamics of that E-RGM (not only distance but also time, frequency, organization, and control over the conditions of mobility). As shown in the special issue, in North America, travel time generally is not counted as working time which means that the conditions of travel and its potential impacts on life at work and at home are largely unregulated and individualized as in the case of mobile seafarers and other workers. In Canada, mobile workers (including intra- and inter-provincial workers) are largely invisible from a regulatory point of view, even more invisible than international migrant workers. When internally mobile workers cross provincial boundaries they normally retain eligibility for workers' compensation – so long as their sector is covered in the province of employment – but they may not know this. Access may be more complicated, and there may be issues with both levels of compensation and return to work. Systems regulating international migrant workers are complex; there are multiple categories and programs for managing these workers. They are generally more visible to immigration officials but because immigration in Canada is a federal responsibility, and health and safety and workers' compensation are a provincial responsibility, information about international migrants is not consistently shared between these agencies.¹¹ Furthermore, because international migration is generally accompanied by enhanced layers of vulnerability related to employment in hazardous jobs and, in some cases, work permits that tie them to a particular employer, international migrants can be highly vulnerable to injury and illness and poorly protected by existing regulatory frameworks. Articles by Hill et al.⁹ and Cedillo et al.¹¹ both point to the contractual obligations of employers of TFWs that are not consistently complied with. The issue of worker voice in raising OHS concerns was shown to be a particular challenge for the mobile workforce, both because of their precarious migration status, in the case of international migrants, but

also because of work organizational factors in ships²⁴ and in remote locations where workers' ability and willingness to actively participate in health and safety matters is constrained.³¹

Key insights from the NAW program discussed in Howse⁴² point to the need for innovative, carefully designed, and sustained programs of education, training, and community support for migrant workers. While important, as the article suggests, access to funding supports for sustained programs of this kind is elusive and indeed threatened by current politics in Canada, the U.S. and elsewhere around immigration, labor migration and growing tolerance for profound violations of migrant workers' rights. Sustained improvement in the protection of these workers' rights, including health and safety, requires carefully designed and ongoing efforts to change policy and to address sectoral, regional and global realities like corporate concentration, outsourcing and subcontracting, deep inequalities within and between countries, the erosion of democratic institutions, and harnessing of the financial and regulatory powers of the state to the interests of capital rather than the wider public good.

The active work of researchers, unions, social justice groups, OHS and public health professionals and policy-makers to understand, document and identify policy and other strategies to address these effects including as they operate through intersections between work, mobility, family and wider society, is essential. This work must, however, be done with careful attention to what workers say they want and need and to available opportunities and constraints. As argued recently by Weiler and McLaughlin,⁴⁷ for instance, despite the threats to rights, freedom, dignity and voice associated with Canada's temporary foreign worker programs, abolition rather than reform of these programs in the context of wider social justice initiatives is not the best way to strengthen the rights of these workers. Many, but by no means all, international migrant workers want to move to the host country; access to permanent residency will not, in and of itself, eliminate the OHS and other vulnerabilities of these workers and the right to mobility for work is essential to their health and well-being and that of their families, particularly in the context of economic volatility and precarious employment. Designing policies to try to limit internal mobility, including the capacity of migrant workers from rural and often

higher unemployment regions within Canada and elsewhere to travel to other regions for work, would be similarly short-sighted and narrow in its focus.

Finally, new regulatory interventions that could address some of the hazards related to mobility may well limit workers' agency and ability to decide how and when they want to engage in the mobile workforce. As shown in some of the papers in this issue,^{11,32,42} the work of labor unions and of other forms of community unionism are making a contribution to promoting the best conditions possible for workers engaged in the mobile work-force, however in other cases it would appear that the mobility issues are not yet being addressed collectively by worker organizations. Invisibility of these issues for the labor movement, compounded by management prerogatives in labor legislation, leaves the work organization decision making to employers who have the freedom to determine schedules and work organization without the impediment of regulation that could be designed to prevent fatigue related to long commutes preceding shifts, for example. Leadership from organizations representing workers both with regard to working conditions of international migrants but also with regard to the conditions applicable to the internally mobile workforce could shape the regulatory agenda in a way that acknowledges the need for prevention as well as the privacy rights of workers who want to maintain control of their commuting arrangements.

The research presented in this special issue has explored the legal and practical contexts within which workers' rights, health and safety, and lives are impacted by E-RGM. Ideally this evidence will be a useful resource for establishing effective policies and enforceable laws and programs that will prevent the exploitation of workers whose employment is shaped by geographical mobility requirements.

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