

The Department acknowledges the contribution of the Extractive Industries Taskforce to this study.

### For more information

The full report, Extractive Resources in Victoria: Demand and Supply Study, 2015–50 (May 2016), can be downloaded at energyandresources.vic.gov.au/earth-resources

For further information about the Department's extractives work program, please contact Minerals Development Victoria mdv@ecodev.vic.gov.au

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Economic Development, Jobs, Transport and Resources

# this growth.

In 2015, the Victorian Government commissioned a long-range forecast of demand and supply of quarry resources to 2050, to help plan for Victoria's future growth.

### PLANNING FOR THE FUTURE TO KEEP CONSTRUCTION AFFORDABLE

Victoria's population is growing, and we will need to build new housing, roads, rail lines, hospitals, schools and other public infrastructure to support this growth.

The building materials used in construction – concrete, road base, asphalt, aggregates, bricks and paving – are all made from stone, sand, clay and other resources, most of which come from quarries across Victoria.

These raw extractive resources are the foundation of our built environment, contributing to Victoria's economic development, jobs, liveability and the wellbeing of our communities.

These resources are expensive to transport, so we need to ensure we can source them close to where they will be needed the most, particularly around the high growth areas of Greater Melbourne and major regional centres across Victoria.

This helps to keep construction costs down. Minimising the distances that trucks transporting these resources need to travel will also help to reduce traffic congestion, protect the amenity of local areas, and reduce wear and tear on our roads.

If we don't manage access to quarry resources, it could have significant flow-on effects for construction costs in the future – not just for public infrastructure, but also for housing.

To plan for Victoria's growth, we need to better understand our reserves of these vital resources, as well as the likely future demand for them.

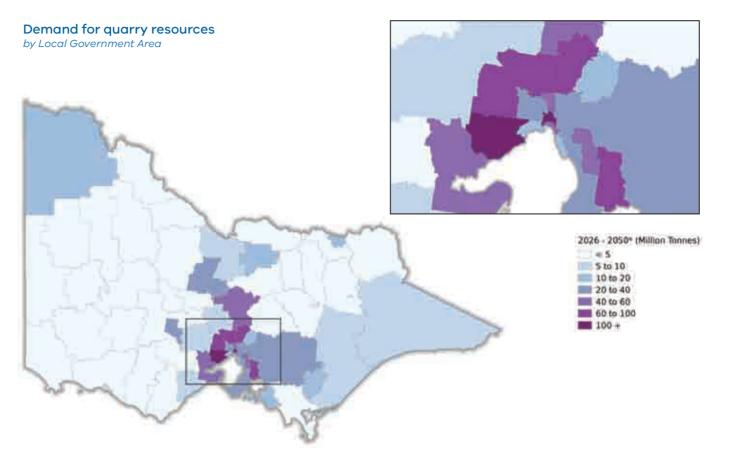
# ABOUT QUARRY PRODUCTS IN VICTORIA

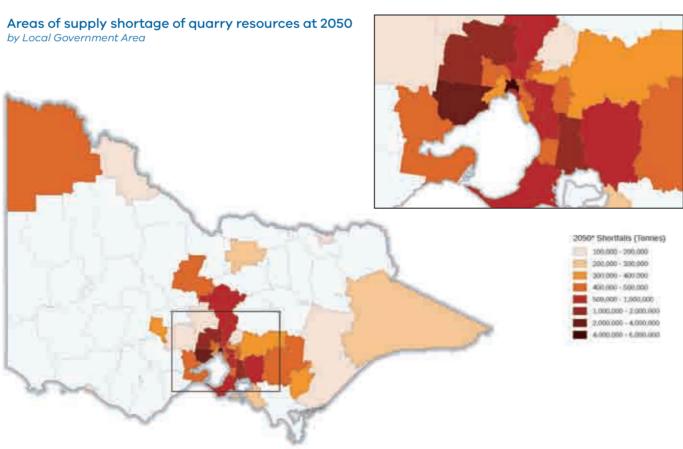
Around 480 quarries across Victoria produce close to 46 million tonnes of extractive materials annually, including stone, sand, gravel and limestone for the construction sector. That's around seven tonnes per person each year.

Quarries are a major part of our \$21 billion building and construction industry. The value of production from quarries is estimated at around \$676 million a year, contributing to investment and jobs in Greater Melbourne, Geelong, Ballarat, Bendigo, other regional centres and rural Victoria.

Extractive resources typically account for around one third of the total costs of materials for typical construction projects.

# KEY FINDINGS OF THE STUDY





Further analysis will be undertaken in consultation with local councils to identify the specific locations of key resources within local government areas.

The study looked at the 79 local government areas across Victoria over two time periods, 2015-25 and 2026-50.

To forecast supply, the study surveyed quarries about their existing operations and future plans. More than 220 quarry operators responded, representing 81 per cent of Victoria's current production of extractive resources by volume.

# 50%

of Victoria's construction activity to 2026 is comprised of residential construction.

### 39%

more quarry resources will be required for construction state-wide by 2050 (88 million tonnes, up from 46 million tonnes in 2015).

### 15 LOCATIONS

across Victoria will be critical to the *efficient supply of quarry resources* to key growth areas in Greater Melbourne and regional Victoria.

# 34%

of Victoria's requirements for quarry resources by 2050 will need to be sourced from new quarries that have not yet been planned, as existing and planned quarries begin to cease operation.

# QUARRY RESOURCE TYPES

will be nearly exhausted from current and planned quarries by 2050 (hornfels stone and clay/clay shale).

# 11 BILLION TONNES

of quarry resources are forecast to be available from current and planned quarries across Victoria by 2050.

# 112 km

is the average distance that quarry products are currently transported from quarry gate to where the resources are used.

### \$2 BILLION

additional transport costs would be incurred for every extra 25 kilometres that quarry resources must be transported from quarry gate to where the materials are used, over the period 2015-50.

### **FUTURE DEMAND**

Most of the forecast demand will be driven by population growth in the central and growth areas of Greater Melbourne, particularly the northwest and southeast corridors.

Key areas of future demand include the local government areas of Melbourne, Hume, Casey, Whittlesea and Wyndham.