This is a case study of one district, examining secondary mathematics teachers’ perceptions of professional learning and teacher professional development. Research questions include: a) Why did the teachers from this district want to learn professionally? b) What did they want to learn? and c) How did these teachers want to learn? Mainly qualitative, and some quantitative, data was used for this project. Participants included thirty-five grades 6-12 mathematics teachers with different teaching backgrounds (representing eight schools), and one mathematics district coordinator. The findings suggest that teacher learning is largely dependent on the contexts within which teachers are situated. All teachers engaged in professional learning, including those who did not attend district-sponsored professional development. Teachers were found to be motivated to learn for three reasons: student learning and advancement, teacher career advancement and promotion, and the district requirement for learning. Moreover, novice and experienced teacher needs differed significantly. However, most of the teachers described effective professional development within eight mathematics topics: content, curriculum, assessment, student learning, instructional strategies, classroom management, teaching philosophies, and technology. Teachers described working with other mathematics teachers in the building as the most effective learning opportunity. Opportunities for common lesson planning and reflections, teacher community learning, and sharing of instructional ideas were emphasized strongly by all teachers. Discussion includes connections between teacher learning, teacher motivation, and educational policy research. Implications for Teacher Education research have also been provided.